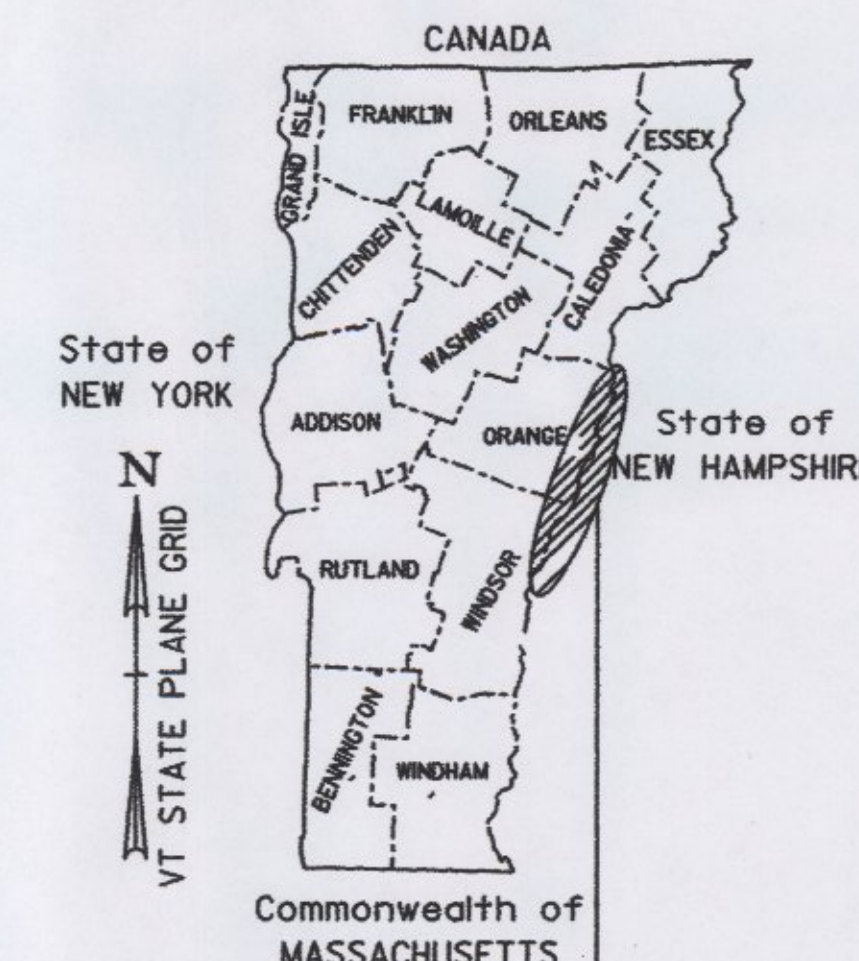


STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
HARTFORD-NEWBURY
TOWNS OF HARTFORD-NEWBURY
COUNTIES OF WINDSOR & ORANGE

INTERSTATE 91 - NORTHBOUND & SOUTHBOUND - GUARDRAIL

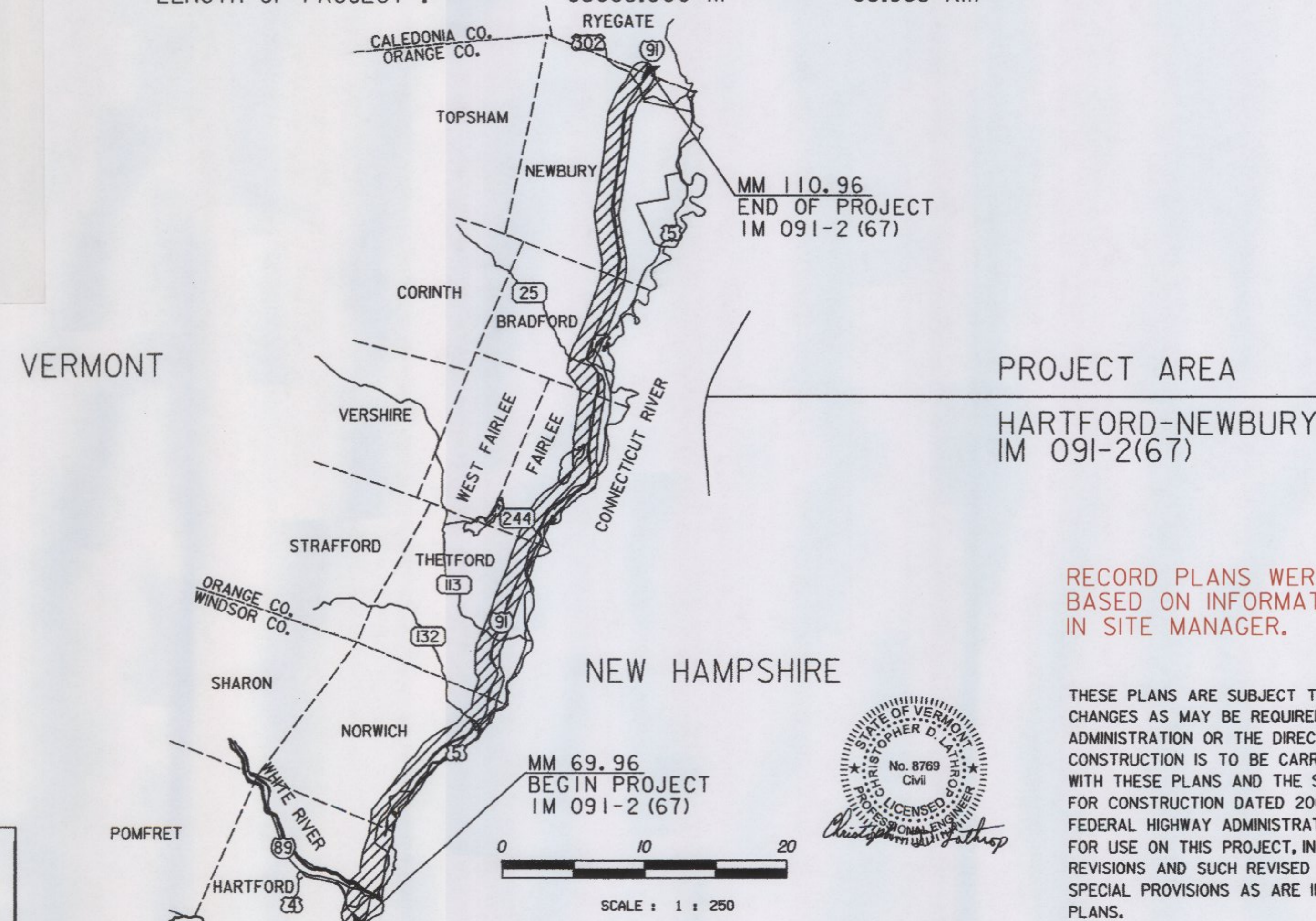


RECORD PLANS	
CONTRACTOR:	F. R. LAFAYETTE, INC. - ESSEX JUNCTION, VT
RESIDENT ENGINEER:	CARL FIELDER
CONSTRUCTION BEGAN:	APRIL 16, 2007
CONSTRUCTION COMPLETE:	OCTOBER 10, 2007
RECORD PLANS BY:	CARL FIELDER VIA SITE MANAGER
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY	<i>for Carl Fielder</i> RESIDENT ENGINEER
DATE	10/31/2013
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

PROJECT LOCATION: THE NORTHBOUND AND SOUTHBOUND INTERSTATE BARRELS BEGINNING AT MM 69.96 AND EXTENDING NORTHERLY 65.983 KM TO MM 110.96, THE NEWBURY/RYEGATE TOWN LINE.

PROJECT DESCRIPTION: GUARDRAIL AND CURB REHABILITATION, REPLACEMENT, AND MODIFICATIONS, AND OTHER RELATED ITEMS.

LENGTH OF ROADWAY : 65983.000 m 65.983 km
LENGTH OF PROJECT : 65983.000 m 65.983 km



RECORD PLANS WERE CREATED
BASED ON INFORMATION RECORDED
IN SITE MANAGER.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT. CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JANUARY 4, 2001 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

Metric

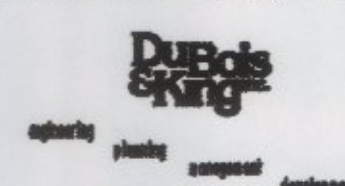
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED <i>Mark D. Kistner</i> DATE 10-23-06	for DIVISION ADMINISTRATOR
APPROVED <i>Robert L. Thompson</i> DATE 9/25/06	DIRECTOR OF PROGRAM DEVELOPMENT
PROJECT MANAGER: ROGER L. THOMPSON	
PROJECT HARTFORD - NEWBURY ACIM 091-2(67)	
SHEET 1 OF 32 SHEETS	

CONVENTIONAL SIGNS

COUNTY LINE	---
TOWN LINE	---
LIMITS OF ACCESS	---X---
POINT OF ACCESS	X
FENCE LINE	---X---
STONE WALL	-----
TRAVELED WAY	---
GUARD RAIL	---X---
RAILROAD	---X---
SURVEY LINE	---
CULVERT	---
POWER POLE	---
TELEPHONE POLE	---
TREES	---
CONTROL OF ACCESS	---
PROPERTY LINE	---
R.O.W. TAKING LINE	---
SLOPE RIGHTS	---
TOP OF CUT	---
TOE OF SLOPE	---

DATUM

VERTICAL	N/A
HORIZONTAL	N/A



INDEX OF SHEETS

1.	TITLE SHEET
2.	INDEX OF SHEETS
3.-5.	QUANTITY SHEETS
6.	GENERAL NOTES
7.	BURIED GUARDRAIL ENDS AND CURB DETAILS
8.-23.	ITEM DETAIL SUMMARY SHEETS
24.-30.	INTERCHANGE LAYOUT SHEETS
31.	GUARDRAIL TREATMENT AT BRIDGE PIERS/OVERHEAD SIGNS
32.	TRAFFIC CONTROL NOTES

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INDEX
OF
SHEETS



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 09I-2(67)

FILE NAME: ...\\DGN\\z0042IN.dgn	PLOT DATE: 10/12/2006
PROJECT LEADER: C.D. LATHROP	DRAWN BY: R.H. BARNES
DESIGNED BY: R. H. BARNES	CHECKED BY: E.P. DETRICK
	SHEET 2 OF 32

DETAILED SUMMARY OF QUANTITIES

[illegible][illegible]

QUANTITIES	UNIT	ITEMS
		REHABING DI , CB OR MH CLASS I
10	EA	NORTHBOUND
10	EA	SOUTHBOUND
		REHABING DI , CB OR MH CLASS II
5	EA	NORTHBOUND
5	EA	SOUTHBOUND
		REHABING DI , CB OR MH CLASS III
2	EA	NORTHBOUND
2	EA	SOUTHBOUND
		BULLDOZER RENTAL , TYPE I
60	HR	NORTHBOUND
60	HR	SOUTHBOUND
		POWER GRADER RENTAL
60	HR	NORTHBOUND
60	HR	SOUTHBOUND
		ALL PURPOSE EXCAVATOR RENTAL , TYPE I
60	HR	NORTHBOUND
60	HR	SOUTHBOUND
		POWER BROOM RENTAL
320	HR	NORTHBOUND
320	HR	SOUTHBOUND
		POWER BROOM RENTAL , TYPE II
200	HR	NORTHBOUND
200	HR	SOUTHBOUND
		TRUCK RENTAL
60	HR	NORTHBOUND
60	HR	SOUTHBOUND
		LOADER RENTAL , TYPE I
60	HR	NORTHBOUND
60	HR	SOUTHBOUND

DuBois & King Inc.
engineering planning management development

FILE NAME: ...\\DGN\\ZA042QSOI.dgn	PLOT DATE: 10/12/2006
PROJECT LEADER: C.D. LATHROP	DRAWN BY: R.H. BARNES
DESIGNED BY:	CHECKED BY: E.P. DETRICK
	SHEET 3 OF 32

PROJECT NAME: HARTFORD - NEWBURY	
PROJECT NUMBER: IM 091-2(67)	
FILE NAME: ... \DGN\ZA042QS01.dgn	PLOT DATE: 09/25/2006
PROJECT LEADER: C.D. LATHROP	DRAWN BY: R.H. BARNES
DESIGNED BY:	CHECKED BY: E.P. DETRICK
	SHEET 4 OF 32

PROJECT NAME: HARTFORD - NEWBURY	
PROJECT NUMBER: IM 091-2(67)	
FILE NAME: ...\\DGN\ZA042QSO\l.dgn	PLOT DATE: 10/12/2006
PROJECT LEADER: C.D. LATHROP	DRAWN BY: R.H. BARNES
DESIGNED BY:	CHECKED BY: E.P. DETRICK
	SHEET 5 OF 32

GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2001, AND ITS LATEST REVISIONS.
2. GUARDRAIL DETAIL SHEETS ARE PROVIDED AS A GENERAL GUIDE TO GUARDRAIL IMPROVEMENTS. SPECIFIC LOCATIONS OF CONSTRUCTION AND TREATMENT METHODS SHALL BE FIELD LOCATED AND APPROVED BY THE ENGINEER.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MINIMIZE DAMAGE TO THE EXISTING PAVEMENT AND PAVEMENT MARKINGS. THE CONTRACTOR, AT NO ADDITIONAL COMPENSATION, SHALL REPAIR ALL PAVEMENT AND PAVEMENT MARKINGS DAMAGED DURING CONSTRUCTION.
4. AS DIRECTED BY THE ENGINEER, DRAINAGE SWALES, VERTICAL GRANITE CURBS, AND GRANITE SLOPE EDGING SHALL BE SWEEPED AND THE COLLECTED DEBRIS DISPOSED OF BY THE CONTRACTOR. PAYMENT SHALL BE UNDER ITEM 608.31, "POWER BROOM RENTAL, TYPE II."
5. ITEM 203.99 "SHOULDER BERM REMOVAL", HAS BEEN INCLUDED AS AN ESTIMATED QUANTITY TO BE USED IN NECESSARY LOCATIONS, OR AS DIRECTED BY THE ENGINEER. THE PLAN QUANTITY REPRESENTS BERM REMOVAL FOR 75% OF THE RETAINED STEEL BEAM GUARDRAIL LENGTH. ITEM 203.99 WILL BE PAID ONLY IN RETAINED GUARDRAIL AREAS AS DIRECTED BY THE ENGINEER

STEEL BEAM GUARDRAIL NOTES

1. WHERE GUARDRAIL BEAM UNITS ARE DAMAGED AND GUARDRAIL POSTS AND OFFSET BLOCKS ARE NOT DAMAGED, THE GUARDRAIL BEAM UNITS SHALL BE REMOVED AND DISPOSED OF. NEW GUARDRAIL BEAM UNITS SHALL BE ATTACHED TO THE EXISTING POSTS AND OFFSET BLOCKS. THIS WORK SHALL BE PAID FOR UNDER ITEM 621.77, "REPLACE GUARDRAIL BEAM UNIT."
2. WHERE GUARDRAIL POSTS AND / OR OFFSET BLOCKS ARE DAMAGED, THE GUARDRAIL BEAM UNITS, POSTS, OFFSET BLOCKS AND CURBING SHALL BE REMOVED AND DISPOSED OF. NEW STEEL POSTS, SYNTHETIC OFFSET BLOCKS AND STEEL BEAM GUARDRAIL SHALL BE INSTALLED. THE OFFSET BLOCK CHOSEN SHALL BE ONE OF THE OFFSET BLOCKS APPEARING ON THE APPROVED PRODUCTS LIST ON FILE WITH THE AGENCY'S MATERIALS AND RESEARCH SECTION. REMOVAL AND DISPOSAL SHALL BE PAID FOR UNDER ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL." INSTALLATION OF NEW GUARDRAIL, POSTS AND OFFSET BLOCKS SHALL BE PAID FOR UNDER ITEM 621.20, "STEEL BEAM GUARDRAIL (GALVANIZED)." IF CURBING IS NEEDED, NEW 4" BITUMINOUS CONCRETE CURB SHALL BE PAID FOR UNDER ITEM 616.31, "BITUMINOUS CONCRETE CURB, TYPE B."
3. ALL SECTIONS OF GUARDRAIL SHALL BE FITTED WITH NEW GUARDRAIL DELINEATORS IN ACCORDANCE WITH VTRANS STANDARD G-1 AT 7.6 METER INTERVALS (EACH FIFTH POST). DELINEATORS PLACED ON EXISTING GUARDRAIL SHALL BE PAID FOR UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS". DELINEATORS PLACED ON NEW GUARDRAIL SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL PAY ITEM.

GUARDRAIL TERMINAL SECTION NOTES

1. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER A MANUFACTURED TERMINAL SECTION (MTS) SHALL BE INSTALLED ON THE LEADING END OF GUARDRAIL. THE MTS SHALL BE IN ACCORDANCE WITH APPLICABLE VTRANS SPECIFICATIONS. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 621.505, "MANUFACTURED TERMINAL SECTION" OF THE TYPE SPECIFIED.
2. WHERE AN MTS IS TO BE CONSTRUCTED, THE AREA SHALL BE GRADED IN ACCORDANCE WITH VTRANS STANDARD G-19. ALL EXISTING TOPSOIL SHALL BE STRIPPED FROM THE EXISTING SLOPE IN THE AREA OF A PROPOSED MTS AND STOCKPILED. A PLATFORM FOR THE MTS SHALL BE CONSTRUCTED AND THE SLOPE GRADED USING EARTH BORROW. THE PLATFORM SHALL BE TOPPED WITH 150 mm OF AGGREGATE SHOULDERS. ALL EXPOSED SIDE SLOPES SHALL BE TOPSOILED USING STOCKPILED TOPSOIL, SEEDED, FERTILIZED, AND MULCHED WITHIN 48 HOURS. PAYMENT FOR EXCAVATION OF THE TOPSOIL SHALL BE PAID UNDER ITEM 203.15 "COMMON EXCAVATION." PAYMENT FOR EARTH BORROW SHALL BE PAID UNDER ITEM 203.30 "EARTH BORROW." PAYMENT FOR AGGREGATE SHOULDERS SHALL BE MADE UNDER ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS) OR 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT". PLACEMENT OF THE STOCKPILED TOPSOIL SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.15, "COMMON EXCAVATION." SEED, FERTILIZER AND MULCH SHALL BE PAID FOR UNDER APPROPRIATE CONTRACT ITEMS.
3. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER A TRAILING END TERMINAL SHALL BE INSTALLED ON THE TRAILING END OF GUARDRAIL. THE TRAILING END TERMINAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE VTRANS STANDARDS AND SPECIFICATIONS. PAYMENT FOR THIS WORK SHALL BE PAID UNDER ITEM 621.52, "TRAILING END TERMINAL."

BITUMINOUS CONCRETE CURB, TYPE B AND BITUMINOUS GUTTERS NOTES

1. WHERE NEW BITUMINOUS CONCRETE CURBING IS TO BE PLACED, THE CONTRACTOR SHALL SAWCUT EXISTING BITUMINOUS CONCRETE PAVEMENT 300mm FROM THE PROPOSED FACE OF GUARDRAIL POSTS. THE EXISTING ASPHALT FILLET AND BITUMINOUS CONCRETE PAVEMENT SHALL BE REMOVED TO THE NEAT LINE OF THE SAW CUT. WHERE GUARDRAIL IS TO BE REMOVED PAYMENT FOR THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL".
2. WHERE NEW STEEL BEAM GUARDRAIL AND BITUMINOUS CONCRETE CURB ARE INSTALLED ADJACENT TO AN EXISTING DROP INLET (DI) THE CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE OF STORM WATER INTO THE EXISTING DI. AT THE DIRECTION OF THE ENGINEER, THE CONTRACTOR SHALL MOVE OR MODIFY EXISTING DI'S. THIS WORK SHALL BE PAID UNDER ITEMS 604.412, "REHABILITATING DI, CB OR MH CLASS I", ITEM 604.415, "REHABILITATING DI, CB OR MH CLASS II" AND ITEM 604.418, "REHABILITATING DI, CB OR MH CLASS III".
3. PREPARATION OF EXISTING SUBBASE AND REPLACEMENT OF BITUMINOUS CONCRETE PAVEMENT TO THE NEAT LINE OF THE SAW CUT SHALL BE PAID FOR UNDER ITEM 616.47, "BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS". ALL BITUMINOUS CONCRETE CURB SHALL BE BACKED WITH ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS)" OR 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT".
4. ALL OTHER WORK DEEMED NECESSARY TO INSTALL NEW BITUMINOUS CONCRETE CURBS SHALL BE CONSIDERED INCIDENTAL TO ITEM 616.31, "BITUMINOUS CONCRETE CURB, TYPE B".
5. WHERE BITUMINOUS CONCRETE GUTTERS ARE ENCOUNTERED, THEY SHALL BE EXCAVATED 200 mm DEEP, 150 mm OF SUBBASE OF DENSE GRADED CRUSHED STONE SHALL BE PLACED AND SHAPED, AND THE GUTTERS SHALL BE PAVED WITH 50 mm OF BITUMINOUS CONCRETE PAVEMENT. EXCAVATION SHALL BE PAID FOR UNDER ITEM 203.15, "COMMON EXCAVATION". SUBBASE OF DENSE GRADED CRUSHED STONE SHALL BE PAID FOR UNDER ITEM 301.35, "SUBBASE OF DENSE GRADED CRUSHED STONE". PAVEMENT SHALL MEET SPECIFICATION FOR MEDIUM DUTY BITUMINOUS CONCRETE PAVEMENT AND SHALL BE PAID FOR UNDER ITEM 616.47, "BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS".

TREATED TIMBER CURB NOTES

1. ALL TREATED TIMBER CURB THAT IS NOT CALLED FOR REMOVAL SHALL BE JOINTLY INSPECTED BY THE CONTRACTOR AND THE ENGINEER. AT THE DISCRETION OF THE ENGINEER, DEFICIENT AREAS OF TREATED TIMBER CURB SHALL BE REMOVED AND REPLACED. TREATED TIMBER CURB SHALL BE REMOVED BY SAWCUTTING THE PAVEMENT 300 mm FROM THE FACE OF POST. THE SAWCUT PAVEMENT, TIMBER CURB AND CONNECTION BRACKETS SHALL BE REMOVED AS SHOWN IN TREATED TIMBER CURB REMOVAL DETAIL ON SHEET 7. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 616.41, "REMOVAL OF EXISTING CURB".
2. INSTALLATION OF NEW TREATED TIMBER CURB AND BITUMINOUS CONCRETE FILLET SHALL BE PAID FOR UNDER ITEM 616.35, "TREATED TIMBER CURB". AGGREGATE SHOULDER MATERIAL SHALL BE PLACED BEHIND THE NEW TREATED TIMBER CURB. AGGREGATE SHOULDERS SHALL BE PAID FOR UNDER ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT" OR ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS)". THE WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 616 OF THE SPECIFICATIONS AND IN ACCORDANCE WITH THE DETAIL FOR TREATED TIMBER CURB INSTALLATION ON SHEET 7.

CABLE GUARDRAIL NOTES

1. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER, DAMAGED CABLE GUARDRAIL, POSTS AND TREATED TIMBER CURB SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. PAYMENT FOR REMOVAL AND DISPOSAL OF CABLE GUARDRAIL, POSTS AND CURB SHALL BE MADE UNDER ITEM 621.80, "REMOVAL AND DISPOSAL OF GUARDRAIL".
2. WHERE CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER, CABLE GUARDRAIL SHALL BE REPAIRED. REPAIR OF CABLE GUARDRAIL SHALL INCLUDE REPLACEMENT OF DAMAGED OR DEFORMED GUARDRAIL POSTS, REPLACEMENT OF DAMAGED OR MISSING J-BOLTS ON EXISTING REMAINING GUARDRAIL POSTS, AND RETENSIONING OF CABLE RAIL. REMOVAL AND DISPOSAL OF DAMAGED GUARDRAIL POSTS AND SUPPLYING AND INSTALLING NEW GUARDRAIL POSTS SHALL BE PAID FOR UNDER ITEM 621.76, "REPLACE GUARDRAIL POST ASSEMBLY". RETENSIONING CABLE GUARDRAIL SHALL BE PAID FOR UNDER ITEM 621.65, "ANCHOR FOR CABLE RAIL (MOD.)". SUPPLYING AND INSTALLING NEW J-BOLTS SHALL BE CONSIDERED INCIDENTAL TO RETENSIONING CABLE RAIL.
3. ALL CABLE GUARDRAIL THAT HAS BEEN REPAIRED SHALL RECEIVE NEW REFLECTIVE SHEETING ON EXISTING REFLECTOR UNITS. THE EXISTING REFLECTOR UNIT SHALL BE CLEANED FREE OF DEBRIS, DRIED, AND NEW SELF ADHESIVE SHEETING SHALL BE APPLIED OVER THE TOP OF THE EXISTING REFLECTOR UNIT. THE SHEETING SHALL BE TYPE VII, VII, OR IX FOR MEDIAN RAIL AND TYPE III OR GREATER FOR OUTSIDE RAIL. THE CLEANING OF EXISTING REFLECTOR UNITS AND THE SUPPLYING AND INSTALLATION OF NEW SHEETING SHALL BE PAID FOR UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS (MOD.)". IF THE EXISTING RELECTOR UNIT IS MISSING, A NEW REFLECTOR UNIT SHALL BE INSTALLED UNDER ITEM 676.15, "REMOVE AND REPLACE REFLECTOR UNITS".

REMOVING AND RESETTNG CURB

1. WHERE CALLED FOR IN THE PLANS "REMOVING AND RESETTNG CURB" WILL MEAN "GRANITE SLOPE EDGING" OR "VERTICAL GRANITE CURB". THIS WORK SHALL BE COMPLETED IN ACCORDANCE WITH SECTION 616 OF THE SPECIFICATIONS. "
2. THE CURBING TO BE REMOVED SHALL BE BY SAW CUTTING (NOT WHEEL CUTTING) THE PAVEMENT, 600 MM MEASURED HORIZONTALLY FROM THE TOP OF THE CURB TO THE ROADWAY, 50 MM IN DEPTH.
3. ALL WORK AND MATERIALS TO REMOVE AND RESET CURB INCLUDING SAW CUTTING, EXCAVATION, SUBBASE MATERIAL, AND PLACING NEW PAVEMENT WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 616.40 " REMOVING AND RESETTNG CURB".

SEEDING FORMULA
RURAL AREAS

% MASS	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREEPING RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFOIL	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

GENERAL NOTES

SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY MASS AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).

AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4.5 Ton/ha, OR AS DIRECTED BY THE ENGINEER.

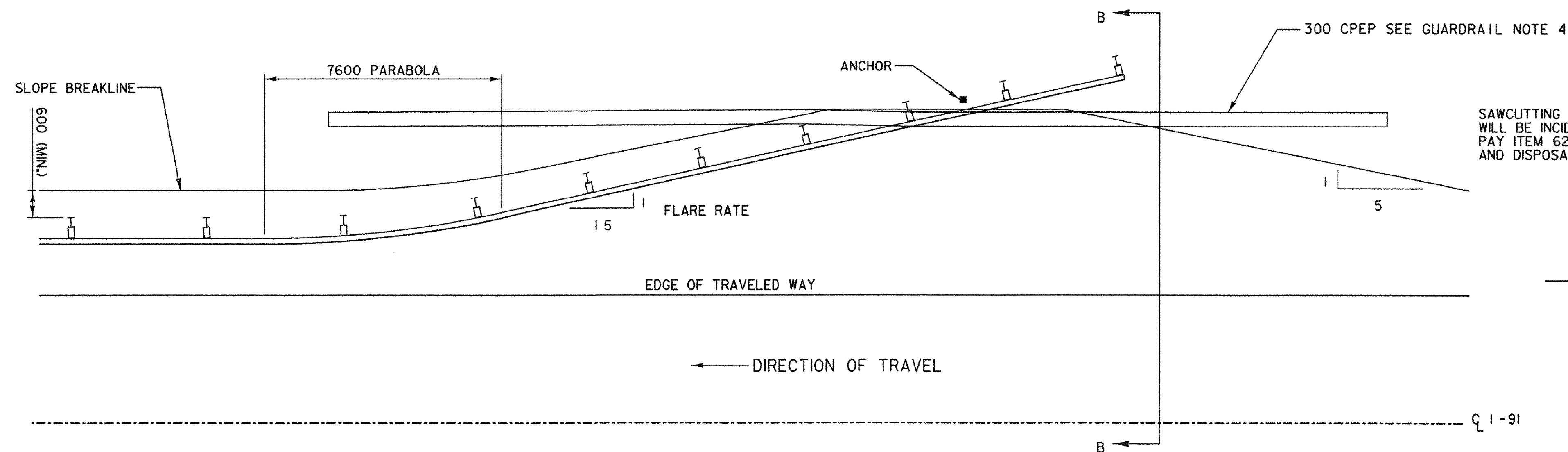
HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4.5 Ton/ha, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

PERFORMANCE-GRADED ASPHALT BINDER

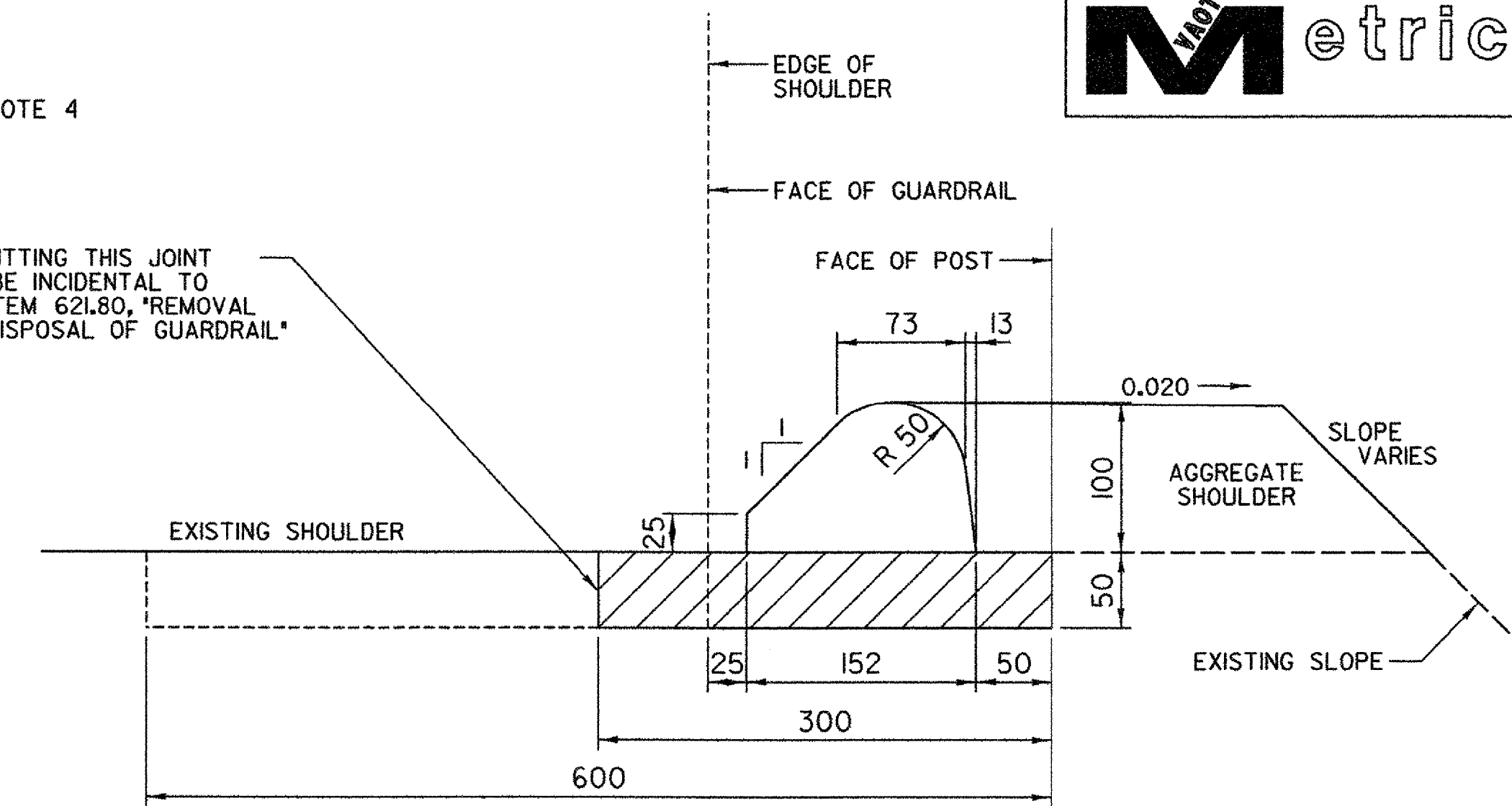
1. ALL BITUMINOUS MATERIAL USED ON THIS PROJECT SHALL BE PG 58-28.

GENERAL NOTES	 engineering planning management development	PROJECT NAME: HARTFORD - NEWBURY	
		PROJECT NUMBER: IM 09I-2(67)	
		FILE NAME: ...\\DGN\\zad042GN0I.dgn PROJECT LEADER: C.D. LATHROP DESIGNED BY: A.P. GUYETTE	PLOT DATE: 10/12/2006 DRAWN BY: A.P. GUYETTE CHECKED BY: E.P. DETRICK SHEET 6 OF 32



DETAIL FOR BURIED GUARDRAIL ENDS INTO BACKSLOPE WITH RUBRAIL

NOT TO SCALE

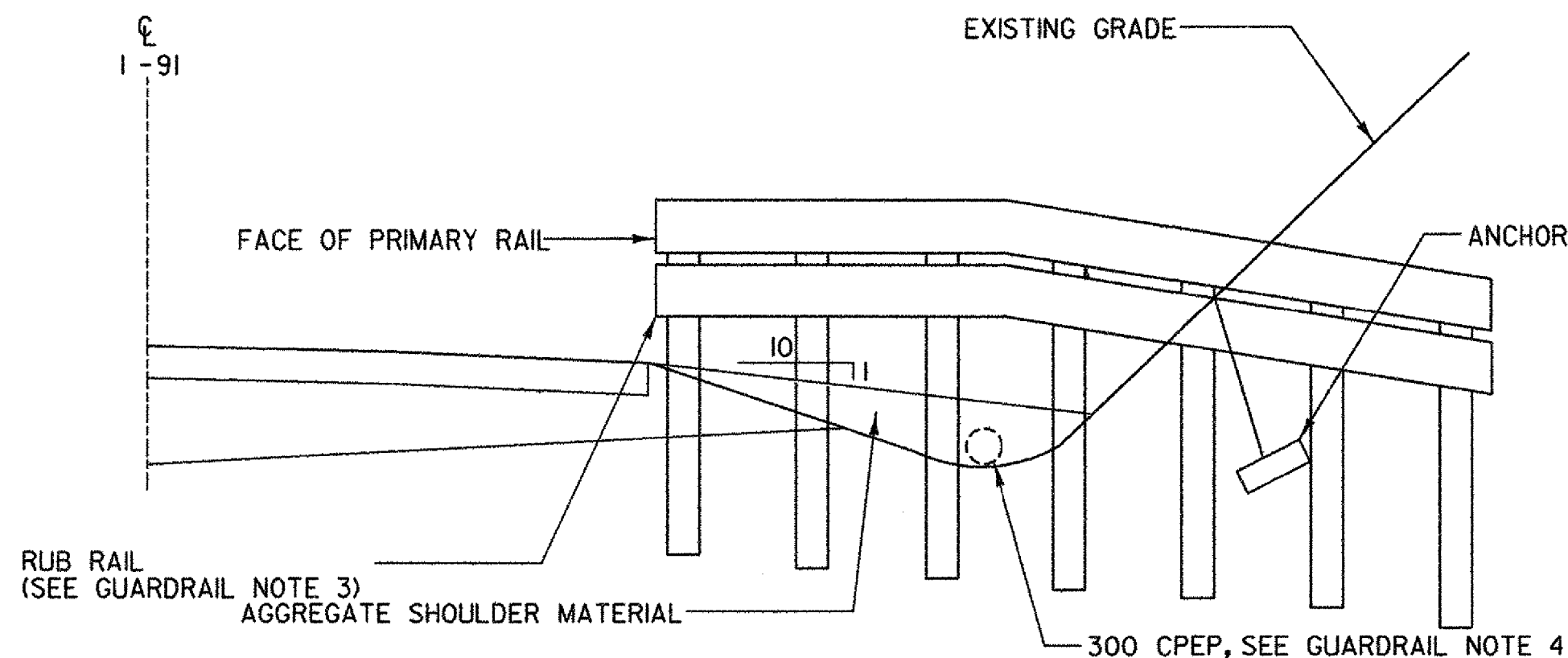


BITUMINOUS CONCRETE CURB DETAIL TYPE B

NOT TO SCALE

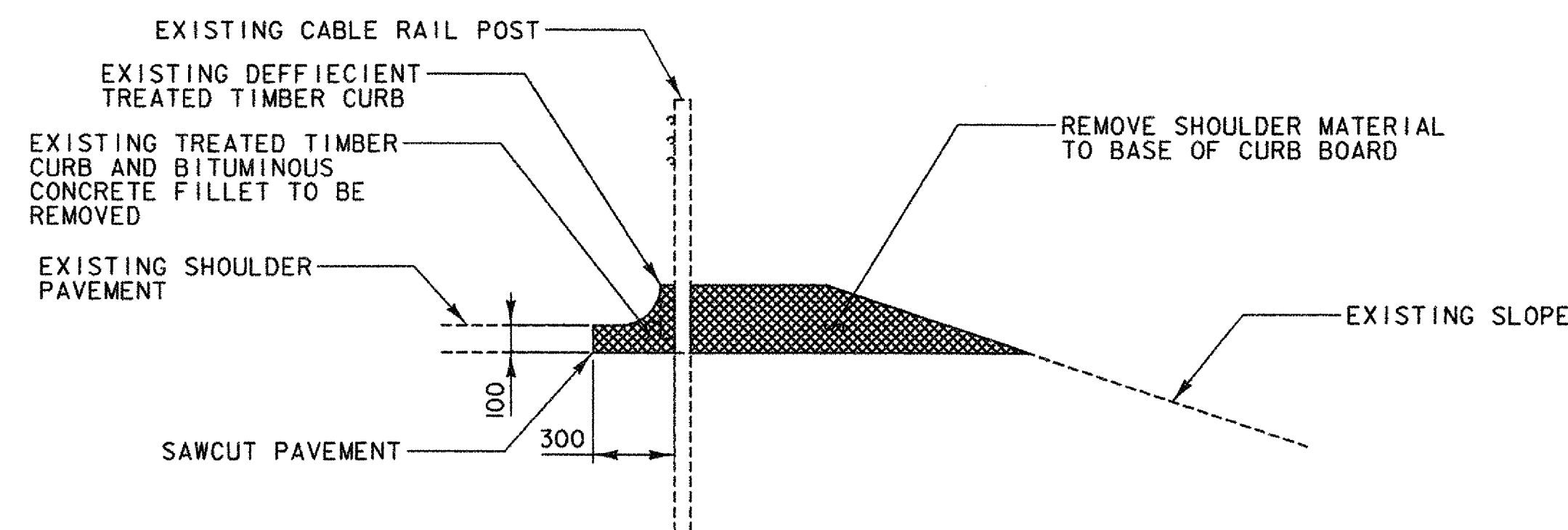
BITUMINOUS CURB NOTES:

1. TO BE USED FOR REPLACEMENT OF TREATED TIMBER CURB WITH BITUMINOUS CONCRETE CURB, TYPE B WITHIN THE LIMITS OF THE PROJECT. WHERE GUARDRAIL IS REPLACED, ALL TREATED TIMBER CURB SHALL BE REMOVED AND REPLACED WITH BITUMINOUS CONCRETE CURB, TYPE B AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. THE PREPARATION OF BED, PLACING AND SEALING OF BITUMINOUS CONCRETE CURB SHALL BE IN CONFORMANCE WITH SECTION 616 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.
3. APPROXIMATE WEIGHT OF CURB = 27.14 KG/METER



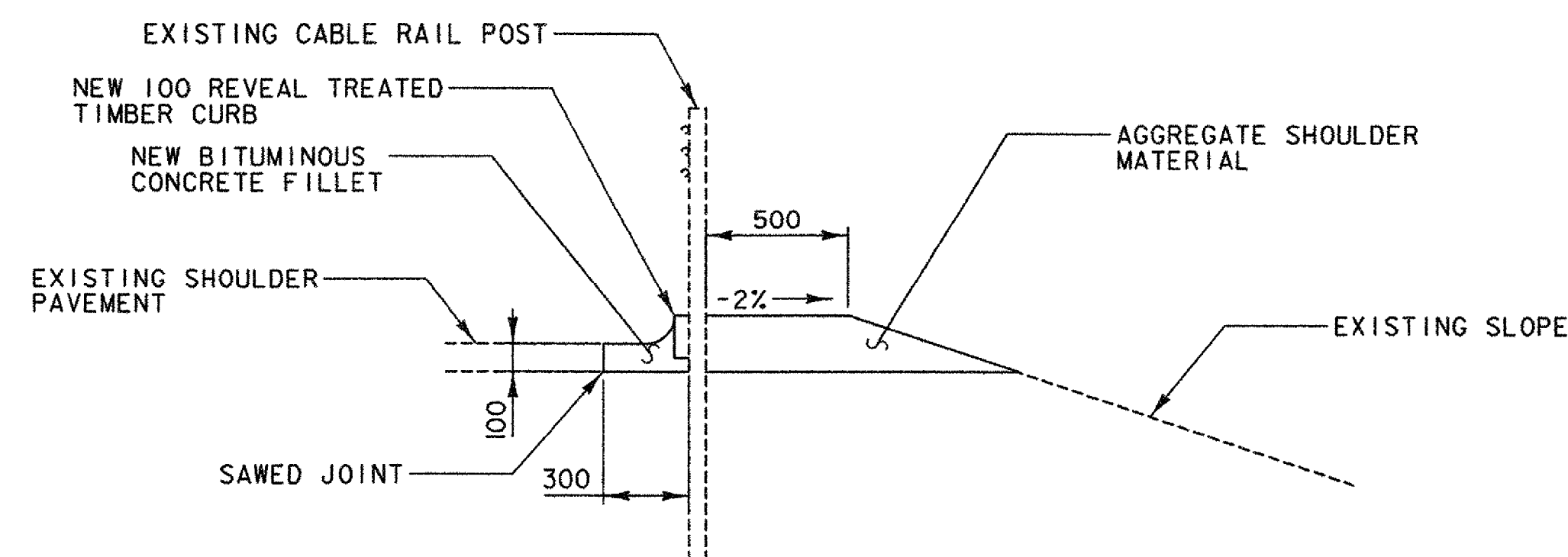
SECTION B-B

NOT TO SCALE



TREATED TIMBER CURB REMOVAL

NOT TO SCALE



TREATED TIMBER CURB INSTALLATION

NOT TO SCALE

GUARDRAIL NOTES:

1. BURIED GUARDRAIL END DETAIL PROVIDED TO BE USED AT THE DISCRETION OF THE ENGINEER.
2. THE ELEVATION OF THE PRIMARY RAIL SHALL REMAIN CONSTANT UNTIL RAIL CROSSES LOWEST POINT OF DITCH BOTTOM.
3. ADDITION OF RUB RAIL IS REQUIRED WHEN VERTICAL CLEARANCE BENEATH PRIMARY RAIL EXCEEDS 300 mm.
4. INSTALL 300 mm DIA. CPEP AS DIRECTED BY THE ENGINEER. 300mm CPEP SHALL BE PAID WITH PAY ITEM 601.0905, "300 mm CPEP".
5. EXCAVATION NEEDED FOR THE INSTALLATION OF BURIED END TREATMENTS SHALL BE PAID FOR UNDER ITEM 203.15, "COMMON EXCAVATION".
6. THE USE OF A BURIED END TREATMENT SHALL INCORPORATE AN ANCHOR AS SHOWN IN THE DETAIL. ALL MATERIALS AND WORK ASSOCIATED WITH INSTALLATION OF THE ANCHOR SHALL BE PAID FOR UNDER ITEM 621.60, "ANCHOR FOR STEEL BEAM RAIL".
7. WHERE RUB RAIL IS NECESSARY, IT SHALL BE PAID FOR UNDER ITEM 621.20, "STEEL BEAM GUARDRAIL (GALVANIZED)" AT A FACTOR OF 1.4.

TREATED TIMBER CURB NOTES:

1. WHERE EXISTING GUARDRAIL POSTS ARE TO REMAIN AND WHERE TREATED TIMBER CURB IS TO BE REMOVED AND REPLACED, IN PART OR IN WHOLE, WITH NEW TREATED TIMBER CURB, THE SAWED JOINT SHALL BE 100 mm DEEP. REMOVAL OF THE CURB AND BITUMINOUS CONCRETE FILLET SHALL BE PAID FOR UNDER ITEM 616.41, "REMOVAL OF EXISTING CURB". THE REMOVAL SHALL BE AS SHOWN IN "TREATED TIMBER CURB REMOVAL" DETAIL.
2. INSTALLATION OF NEW TREATED TIMBER CURB SHALL BE AS SHOWN IN THE "TREATED TIMBER CURB INSTALLATION" DETAIL. INSTALLATION OF THE NEW TREATED TIMBER CURB SHALL BE PAID FOR UNDER ITEM 616.35, "TREATED TIMBER CURB". THE NEW BITUMINOUS CONCRETE FILLET SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF THE NEW TREATED TIMBER CURB. AGGREGATE SHOULDER MATERIAL SHALL BE PLACED BEHIND NEW TREATED TIMBER CURB. PAYMENT FOR AGGREGATE SHOULDER MATERIAL SHALL BE MADE UNDER ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT" OR ITEM 402.11, "AGGREGATE SHOULDERS, TRUCK MEASUREMENT (MOD. - COLD PLANE GRINDINGS)".

NOTE: ALL DIMENSIONS IN MILLIMETERS (mm), EXCEPT WHERE NOTED.

**BURIED
GUARDRAIL ENDS
AND CURB
DETAILS**

**DuBois
& King**
engineering planning management development

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\ZA042DT01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 9/27/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E. P. DETRICK
SHEET 7 OF 32

NORTHBOUND ITEM DETAIL SUMMARY SHEET FOR HARTFORD-NEWBURY IM 091 - 2(67)



MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (#)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.50 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	
			STEEL BEAM	CABLE																					
69.96	70.06	OUT	175				175	-160- 137.16			1-			1				13		12	27			REPAIR ERODED AREAS	
69.96	69.98	MED	27				27	-66- 60.96			1			1				15		17	27			EXTENDED SOUTH 54M	
INTERCHANGE 11																									
RAMP D																									
0+021	0+120	RT													60										
70.11	70.14	OUT	46								I													RETAIN EXISTING GUARDRAIL	
70.11	70.14	MED	53								I													RETAIN EXISTING GUARDRAIL	
70.20																								BRIDGE 43N, OVER US ROUTE 5	
70.21	70.33	OUT	190		4	10												3						REPAIR EXISTING GUARDRAIL, REPAIR ERODED AREAS	
70.21	70.22	MED																						RETAIN EXISTING ALUMINUM APPROACH RAIL	
70.58	70.72	OUT	220				220	-205- 209.55			1			1				10		12	27			REPLACE EXISTING GUARDRAIL	
70.95	71.03	OUT						91.44			I													BRIDGE 44N	
71.01	71.09	MED						83.82			I														
71.11	71.48	OUT	490		48	15	19	-129- 148.59						2 1-				15		10				EXTEND SOUTH 114M TO CONNECT TO EXISTING. REPLACE TRAILING END TEMINAL	
INTERCHANGE 12																									
RAMP A																									
0+254	0+417	RT	163		10	7	20	11			1							5		12	27			REPLACE LEADING TERMINAL SECTION WITH MTS	
RAMP C																									
0+006	0+376	RT	318		7	6	50	23	-115- 64.77					1				13		8				CONNECT EXISTING RAMP RUNS	
71.77	71.86	OUT	133							I								3						RETAIN EXISTING GUARDRAIL, REPAIR ERODED AREAS	
71.84	71.88	MED	45							I								2						RETAIN EXISTING GUARDRAIL, REPAIR ERODED AREAS	
71.90	71.91	OUT																2						RETAIN EXISTING GUARDRAIL, REPAIR ERODED AREAS	
71.91	71.94	MED	53							I								2						RETAIN EXISTING GUARDRAIL, REPAIR ERODED AREAS	
72.01																								BRIDGE 45N, OVER WILDER STATE HIGHWAY	
72.32	72.35	MED	52				52	-130- 129.54			1			1				21		23	27			SEE SHEET #31 FOR DETAIL. INSTALL GUARDRAIL BEFORE REMOVING PIER RING	
72.46																								BRIDGE 46, OVER I-91 (TH 33)	
72.60	72.72	OUT	198		7	3	50	19	4		1			1-		0.60	10	1	12	27				CONSTRUCT 5M GUTTER	
72.79	72.97	OUT	285				285	270			1			1-		6.34	8.50	22		12	27			REPLACE EXISTING GUARDRAIL	
SHEET 8 TOTAL				2448	0	76	41	120	831	1079	0	7	0	0	8	60	6.34	9.10	136	1	118	189	0	0	

NORTHBOUND
ITEM DETAIL
SHEET NO. 1

DuBois
& King

engineering
planning
management
development

PROJECT NAME: HARTFORD - NEWBURY

PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\ZA042ID01.dgn

PROJECT LEADER: C.D. LATHROP

DESIGNED BY: C.D. LATHROP

PLOT DATE: 10/12/2006

DRAWN BY: R.H. BARNES

CHECKED BY: E.P. DETRICK

SHEET 8 OF 32

NORTHBOUND
ITEM DETAIL
SHEET NO. 1



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\ZA042ID01.dgn
PROJECT LEADER: C.D. LATHROP
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CHECKED BY: E.P. DETRICK
SHEET 8 OF 32

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (CM)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT, CONCRETE CURB, TYPE B T	616.47 B.C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D.G.C.S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.60 ANCHOR FOR STEEL BEAM RAIL EA			
			STEEL BEAM	CABLE																								
72.93	72.97	MED	57																						RETAIN EXISTING GUARDRAIL			
73.00	73.02	MED																								RETAIN EXISTING ALUMINUM APPROACH RAIL		
73.00	73.02	OUT																								RETAIN EXISTING ALUMINUM APPROACH RAIL		
73.01	73.05	OUT	57											I												RETAIN EXISTING GUARDRAIL		
73.13																										BRIDGE 47N, OVER US ROUTE 5		
73.25	73.50	OUT	395		20	2		19	4		1			1				10		12	27					REPLACE LEADING TERMINAL UNIT WITH MTS		
73.34	73.45	MED		165				165	226 156.21		1			1		3.41	6.37	23	3	25	27					PAVE 15M GUTTER, EXTEND GUARDRAIL SOUTH 76 M		
74.68	74.80	OUT	178		3	4	40				I															REPAIR EXISTING GUARDRAIL		
74.79	74.80	MED	34								I															RETAIN EXISTING GUARDRAIL		
74.83																										BRIDGE 48N, OVER VT ROUTE 10 A		
INTERCHANGE 13																												
RAMP A																												
0+088	0+328	RT		243				243	228 236.22		1			1		6.05	8.10	22		12	27						REPLACE EXISTING GUARDRAIL	
RAMP C																												
0+188	0+351	RT		151				151	140		1					4.06	5.44	13		12	27						END RAMP STA 0+343.87 = MM 75.04 - CONNECT TO MAIN LINE	
74.88	74.89	OUT																									RETAIN EXISTING GUARDRAIL	
74.88	74.89	MED																									RETAIN EXISTING GUARDRAIL	
75.05	75.31	OUT		434				434	430 571.5					1		11.67	15.62	27									MM 75.04 = END OF RAMP STA 0+343.87	COMBINE RUNS
75.36	75.43	OUT		108				108	93 95.25		1			1				10		12	27						REPLACE EXISTING GUARDRAIL	
75.61	75.71	OUT		155				155	140 152.4		1			1				10		12	27						REPLACE EXISTING GUARDRAIL	
75.80	75.83	OUT	34				10	11	15 15.24		1							7		14	27						EXTEND SOUTH 15M	
75.80	75.83	MED	34								I																EXTEND TO NETC APPROACH RAIL BRIDGE 49N	
75.84																											BRIDGE 49N, OVER US ROUTE 5	
75.87	75.88	OUT																									RETAIN EXISTING GUARDRAIL	
75.87	75.88	MED																									RETAIN EXISTING GUARDRAIL	
75.89	76.13	OUT		392				392	377 388.62		1			1		10.54	14.11	30		12	27						REPLACE EXISTING GUARDRAIL	I
76.33	76.78	OUT		623				623	608 701.04		1			1		2.90	3.89	16		12	27						REPLACE EXISTING GUARDRAIL	

Metric

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S.	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.60					
			STEEL BEAM	CABLE																					ANCHOR FOR STEEL BEAM RAIL EA					
76.84	77.15	OUT		506				506	-491- 495.3		1			1				10		12	27									
76.96	77.15	MED		291				291	-276- 278.13		1			1		2.42	3.24	15		12	27									
77.07	MED&OUT																						-50- 61.26	-16- 13.5	BRIDGE #50, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.					
77.47	77.76	OUT	)	460				460	-475- 941.07	)	1					10.08	14.50	27	2	15	27				EXTEND SOUTH 30M, CONSTRUCT 10M GUTTER.					
77.83	78.06	OUT		374				374	-467-					1		4.84	6.48	22		8						EXTEND SOUTH 97M, CONNECT TO PREVIOUS RUN				
77.89	77.94	MED	)	89				89	-78- 266.7	)	1							5		12	27									
77.99	78.06	MED		91				91	-167-					1				12		7						EXTEND SOUTH 80M, CONNECT TO PREVIOUS RUN				
78.37	78.76	MED		628				628	-723- 658.8		1			1		3.41	4.57	27		22	27				EXTEND SOUTH 99M					
78.96	79.08	OUT		193				193	-189- 194.31		1			1				10		12	27									
79.20	79.26	MED		97				97	-123- 125.73		1			1				13		15	27				EXTEND SOUTH 30M					
79.24	79.30	OUT		92				92	-159- 160.02		1			1				16		18	27				EXTEND SOUTH 71M					
79.48	79.69	OUT		338				338	-392- 396.24		1			1				15		17	27				EXTEND SOUTH 58M					
79.87	80.20	OUT	531					531	-516- 502.92		1			1		14.27	19.12	37		12	27				REPLACE EXISTING GUARDRAIL					I
80.15	80.19	MED	34								I														RETAIN EXISTING GUARDRAIL					
80.22																									BRIDGE 51N, OVER OMPOMPANOOUC RIVER & VT ROUTE 132					
80.25	80.38	OUT	201					201	-197- 198.12					1		5.38	7.20	15					10.97	2	BETWEEN BRIDGE 51S & 51N					I
80.25	80.26	MED																												
80.72	81.15	OUT		690				690	-726- 731.52		1			1				14		16	27				EXTEND SOUTH 40M					
81.31	81.46	OUT		242				242	-288- 289.56		1			1				15		17	27				EXTEND SOUTH 50M					
81.40	81.47	MED		120				120	-146- 144.78		1			1				13		15	27				EXTEND SOUTH 30M					
81.68	81.74	OUT		91				91	-155- 160.02		1			1		1.18	1.58	18		18	27				EXTEND SOUTH 68M					
81.71	81.75	MED		61				61	-153- 152.4		1			1				18		20	27				EXTEND SOUTH 96M					
82.16	82.34	OUT		117				117	-238- 236.22		1			1		1.96	2.63	24		23	27				EXTEND SOUTH 125M					
82.60	82.93	OUT	543					543	-528- 533.4		1			1																
83.06	83.23	OUT		270				270	-318- 339.09		1			1				15		17	27				EXTEND SOUTH 52M					
83.08	83.19	MED		181				181	-258- 259.08		1			1				17		19	27				EXTEND SOUTH 81 M					
83.20																									BRIDGE 52N, TH NO. 58 OVER I-91N					
SHEET 10	TOTAL		1309	4931	0	0	0	6206	7063	0	19	0	0	20	0	43.54	59.32	358	2	307	486	50	16							

Metric

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (BALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDER, TRUCK CM	301.35 SUBBASE OF D. G. C. S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS
			STEEL BEAM	CABLE																				
INTERCHANGE 14																								
RAMP D																								
0+334	0+376	RT	42				42	-27- 41.91		1				1				10		12	27			
84.19	84.23	MED	72				72	+34- 140.97		1				1				15		17	27			EXTEND SOUTH 58 M, PIERS, SEE SHEET *31 FOR DETAIL
84.21																								BRIDGE 53, VT ROUTE 113 OVER I-91
84.56	84.64	OUT		119			119	+115- 99.06		1				1				10		12	27			
85.00	85.37	OUT		528			528	-674- 819.15		1				1				17		19	27			EXTEND SOUTH 81 M, GUARDRAIL TO EXTEND THROUGH GAP
85.43	85.45	MED	46		9		12	11	-85- 83.82		1			1				12		19	27			EXTEND SOUTH 85 M
85.43	85.46	OUT	53				53	-94-		1				1				15		17	27			EXTEND SOUTH 56 M
85.56	85.76	OUT		332			332	-379- 758.19		1				1				15		17	27			EXTEND SOUTH 51 M
85.72	85.76	MED		65			65	+28- 133.35		1				1				16		18	27			EXTEND SOUTH 67 M
85.83	86.00	OUT		264			264	329		1				1		5.24	7.02	26		18	27			EXTEND SOUTH 69 M
85.91	86.02	MED		180			180	-269- 274.32		1				1				18		20	27			EXTEND SOUTH 93 M
86.09	86.22	OUT		212			212	-264- 266.7		1				1				15		17	27			EXTEND SOUTH 56 M
86.13	86.22	MED		95			95	+84- 186.69		1				1				18		20	27			EXTEND SOUTH 93 M
86.17	MED&OUT																					50- 59.43	16- 13	BRIDGE *54, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT
86.35	86.42	OUT		110			110	+56- 160.02		1				1				15		17	27			EXTEND SOUTH 50 M
86.36	86.42	MED		106			106	+97- 201.93		1				1				18		20	27			EXTEND SOUTH 95 M
86.86	87.00	OUT		226		8							2 1-											
87.09	87.17	OUT		84			84	+88- 483.87		1				1-				19		21	27			EXTEND SOUTH 108 M
87.24	87.28	OUT		80			80	-249-		1				1				25		27	27			EXTEND SOUTH 60 M, EXTEND NORTH 113M TO CONNECT WITH NEXT RUN
87.35	87.65	OUT		483		14							2	1				5		5				
87.96	88.18	OUT	361				361	-346- 354.33		1				1				10		12	27			REPLACE EXISTING GUARDRAIL
88.43	88.46	MED	49				49	+133- 815.34		1				1				19		21	27			EXTEND SOUTH 99 M
88.43	88.46	OUT	52				52	-37- 34.29		1				1				10		12	27			REPLACE EXISTING GUARDRAIL
88.51	89.05	MED		588			588	-841-						1		3.55	4.75	34		22				EXTEND SOUTH 80 M, CONNECT TO PREVIOUS RUN. EXTEND NORTH 177M
88.90	89.05	OUT						-242- 220.98		1				1				28		30	27			
89.17	89.25	OUT	130		17		20	-56- 57.15		1								5		17	27			EXTEND SOUTH 56 M
SHEET 11 TOTAL			805	3472	26	22	32	3403	5127	0	21	0	3	20	0	8.79	11.77	375	0	410	567	50	16	

[illegible]

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.35 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. CUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS
			STEEL BEAM	CABLE																				
96.00	96.13	MED	203																					RETAIN EXISTING GUARDRAIL
96.77	97.03	MED		415			415	519 514.35		1				1		9.84	13.18	38		21	27			EXTEND SOUTH 108 M
96.81	97.04	OUT		363			363	445 449.58		1				1		9.19	12.31	35		20	27			EXTEND SOUTH 86 M
96.99	MED&OUT																					58 53.95	16 15	BRIDGE #57, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.
97.14	97.31	OUT	267		3																			REPAIR EXISTING GUARDRAIL
97.51	97.61	OUT	171																					RETAIN EXISTING GUARDRAIL
97.58	97.60	MED	34																					RETAIN EXISTING GUARDRAIL
INTERCHANGE 16																								M M 97.63
97.63																								BRIDGE 58N, OVER VT ROUTE 25
97.67	97.68	MED																						RETAIN EXISTING GUARDRAIL
97.67	97.68	OUT																						RETAIN EXISTING GUARDRAIL
97.82	97.85	OUT	61																					RETAIN EXISTING GUARDRAIL
97.82	97.86	MED	46																					RETAIN EXISTING GUARDRAIL
97.88																								BRIDGE 59N, OVER WAITS RIVER
97.91	97.96	OUT																						RETAIN EXISTING GUARDRAIL
97.91	97.96	MED																						RETAIN EXISTING GUARDRAIL
97.97																								BRIDGE 60N, OVER VT ROUTE 25B
97.98	97.99	OUT																						RETAIN EXISTING GUARDRAIL
97.98	97.99	MED																						RETAIN EXISTING GUARDRAIL
98.35	98.41	OUT	88																					RETAIN EXISTING GUARDRAIL
98.39	98.41	MED	38																					RETAIN EXISTING GUARDRAIL
98.41	98.42	OUT																						RETAIN EXISTING GUARDRAIL
98.41	98.42	MED																						RETAIN EXISTING GUARDRAIL
98.43																								BRIDGE 61N, OVER TH. NO. 6
98.44	98.46	OUT																						RETAIN EXISTING GUARDRAIL
98.44	98.46	MED																						RETAIN EXISTING GUARDRAIL
98.74	98.95	OUT		337									1 -2-											RETAIN EXISTING GUARDRAIL
99.07	99.55	OUT	783																					RETAIN EXISTING GUARDRAIL
SHEET 13	TOTAL		1691	1115	3	0	0	778	964	0	2	0	2	2	0	19.03	25.49	73	0	41	54	50	16	

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOO) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 S.C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D.G.C.S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.60 ANCHOR FOR STEEL BEAM RAIL EA	
			STEEL BEAM	CABLE																						
100.03	100.12	OUT							150 148.6		1			1				23		25	27			REST AREA - NEW GUARDRAIL		
100.15	100.22	OUT		121									1											BRADFORD REST AREA - RETAIN EXISTING		
100.30	100.34	OUT		64									1											RETAIN EXISTING GUARDRAIL		
100.63																								BRIDGE 62N, TH NO. 3 OVER I-91N		
101.06	101.19	OUT	209				12	76 76.2		1								12		19	27			EXTEND SOUTH 76 M		
101.30	101.39	OUT		160			160	205 205.7		1				1				15		17	27			EXTEND SOUTH 60 M		
103.27	103.50	OUT	364				7	7																REPAIR EXISTING GUARDRAIL		
103.35	103.51	MED	244		2																			REPAIR EXISTING GUARDRAIL		
103.50																								BRIDGE 63N, OVER TH NO. 1		
103.52	103.53	OUT																						RETAIN EXISTING GUARDRAIL		
103.52	103.53	MED																						RETAIN EXISTING GUARDRAIL		
105.44	105.62	OUT		281			281	354 358.14		1			1			6.18	8.28	28		19	27			EXTEND SOUTH 77M		
105.74	105.87	OUT	200				200	185 198.12		1			1			4.01	5.36	18		12	27			REPLACE EXISTING GUARDRAIL	I	
105.77	105.88	MED	179				179	164 156.21		1			1			4.01	5.36	18		12	27			REPLACE EXISTING GUARDRAIL	I	
105.88																								BRIDGE 64N, OVER TH NO. 4		
105.92	105.96	MED	61				61	57 60.96					1					5						REPLACE EXISTING GUARDRAIL	I	
105.91	105.93	OUT																						RETAIN EXISTING GUARDRAIL		
106.56	106.61	MED		81			81	137 137.16		1			1					15		17	27			EXTEND SOUTH 60 M		
106.88	107.00	MED		194			194	265 266.7		1			1			4.09	5.47	24		19	27			EXTEND SOUTH 75 M		
108.95																								BRIDGE 65S, TH NO. 73 OVER I-91S		
108.95																								BRIDGE 65N, TH NO. 73 OVER I-91N		
109.17	109.29	MED		192			192	267 274.32		1			1					17		19	27			EXTEND SOUTH 79 M		
109.71	109.77	OUT		97		4							1											REPAIR EXISTING GUARDRAIL		
109.98	110.08	OUT		166			166	204 198.12		1			1					14		16	27			EXTEND SOUTH 42 M		
INTERCHANGE 17																								MM 110.34		
110.34																								BRIDGE 66, US ROUTE 302 OVER I-91		
110.34	110.37	MED	42					152.4		I			I											RETAIN EXISTING GUARDRAIL		
110.54	110.58	OUT	46							I														RETAIN EXISTING GUARDRAIL		
SHEET 14	TOTAL			1345	1356	2	4	0	1533	2071	0	10	0	3	10	0	18.29	24.47	189	0	175	270	0	0		

Metric

[illegible]

Metric

[illegible]

Metric

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77	621.76	621.79	621.80	621.20	621.17	621.505	621.65	621.65	621.52	616.40	616.31	616.47	402.11	301.35	203.15	203.30	620.12	620.21	REMARKS	621.60 ANCHOR FOR STEEL BEAM RAIL EA		
			STEEL BEAM	CABLE	REPLACE GUARDRAIL BEAM UNIT EA	REPLACE GUARDRAIL POST ASSEMBLY EA	ADJUST HEIGHT OF GUARDRAIL M	REMOVAL AND DISPOSAL M	STEEL BEAM GUARDRAIL (GALV.) M	CABLE GUARDRAIL M	MTS (FLARED) EA	ANCHOR FOR CABLE RAIL EA	ANCHOR FOR CABLE RAIL (MOD) EA	TRAILING END TERMINAL EA	R & R CURB M	BIT. CONCRETE CURB, TYPE B T	B. C. GUTTER & TRAFFIC ISLANDS TON	AGGREGATE SHOULDERS, TRUCK CM	SUBBASE OF D. G. C. S CM	COMMON EXCAVATION CM	EARTH BORROW CM	CHAIN LINK FENCE 1.8M M	BRACING ASSEMBLY CHAIN LINK 1.8M EA				
100.03	100.28	MED		403		2												10		10				EXTEND NORTH 116 M WITH NEW CABLE GUARDRAIL AND REPLACE 2 POSTS			
99.34	99.62	OUT		458		9												6		6				EXTEND NORTH 69 M WITH NEW CABLE GUARDRAIL AND REPLACE 9 POSTS			
99.08	99.41	MED	584		18	4		12	-45- 45.72		1							9		16	27			EXTEND NORTH 45 M			
98.83	98.95	MED		193			193	-301- 308.61			1			1				20		22	27			EXTEND NORTH 112 M			
98.49	98.51	OUT	43																					RETAIN EXISTING GUARDRAIL			
98.48	98.50	MED	40																					RETAIN EXISTING GUARDRAIL			
98.43																								BRIDGE *61S OVER TH NO. 6			
98.41	98.43	OUT																						RETAIN EXISTING GUARDRAIL			
98.41	98.43	MED																						RETAIN EXISTING GUARDRAIL			
98.01	98.13	OUT	192				192	-177- 179.07			1			1				10		12	27			REPLACE EXISTING GUARDRAIL			
98.01	98.05	MED	55								I													RETAIN EXISTING GUARDRAIL			
97.97																								BRIDGE *60S OVER VT 25B			
97.93	97.98	OUT																						RETAIN EXISTING APPROACH RAIL			
97.93	97.98	MED																						RETAIN EXISTING APPROACH RAIL			
97.93		MED														1.20		2						PAVE GUTTER			
97.88																								BRIDGE *59S OVER WAITS RIVER			
97.85	97.86	MED																						RETAIN EXISTING APPROACH RAIL			
97.80	97.86	OUT	101		21		8	8																REPAIR EXISTING GUARDRAIL			
97.67	97.74	OUT	35								I													RETAIN EXISTING GUARDRAIL			
97.67	97.72	MED	43																					RETAIN EXISTING GUARDRAIL			
97.63																								BRIDGE *58S OVER VT 25			
97.55	97.63	OUT		110									1											RETAIN EXISTING GUARDRAIL			
97.61	97.63	MED																			55.47	15		RETAIN EXISTING APPROACH RAIL			
97.00	MED&OUT																										
INTERCHANGE 16																											
RAMP D																											
0+133	0+325	LT		192		3							I		1										REPAIR EXISTING GUARDRAIL		
0+133	0+350	RT		217		7							I		1			7							REPAIR EXISTING GUARDRAIL AND BACKUP SIDESLOPE WITH AGGREGATE (4' WIDE)		
RAMP C		RT						99.06						I													
97.26		OUT														1.20		2							PAVE GUTTER		
97.12	97.28	OUT	260				260	-245- 243.84			1			1		6.05	8.10	22		12	27				REPLACE EXISTING GUARDRAIL		
97.00																					50	16			BRIDGE *57S, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.		
96.76	97.03	MED		431			431	-452- 430.53			1			1		10.75	14.40	33		15	27				EXTEND NORTH 25 M		
96.76	97.03	OUT		431			431	-478- 476.25			1			1		10.11	13.54	33		17	27				EXTEND NORTH 51 M		
SHEET 17 TOTALS			1353	2435	39	25	0	1527	1706	225	6	4	7	5	0	26.91	38.44	150		4	110	162	50	16			
																			SOUTHBOUND ITEM DETAIL SHEET NO. 2			DuBois & King INC. engineering planning management development		PROJECT NAME: HARTFORD - NEWBURY PROJECT NUMBER: IM 09I-2(67) FILE NAME: ...\\DGN\\ZA042ID03.dgn PROJECT LEADER: C.D. LATHROP DESIGNED BY: R. H. BARNES		PLOT DATE: 10/12/2006 DRAWN BY: R. H. BARNES CHECKED BY: E. P. DETRICK SHEET 17 OF 32	

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDER, TRUCK CM	301.35 SUBBASE OF D. G. C. S.	203.15 EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.205 STEEL BEAM GUARDRAIL GALVANIZED W/2.4M POSTS LF						
			STEEL BEAM	CABLE																											
96.11		MED														1.20		2						PAVE GUTTER							
95.99	96.52	MED	850				850	943 982.98			1			1		15.21	20.38	50			21	27			EXTEND NORTH 108 M, REPAIR EROSION AREAS						
95.99	96.17	OUT	282				282	347 361.95			1			1				17			19	27			EXTEND NORTH 80 M						
95.44	95.73	OUT		430			430	512 514.35			1			1		11.56	15.48	39	2	20	27				EXTEND NORTH 86M, REHAB DI AND ADD D.G.C.S. FOR EROSION						
95.01	95.30	OUT	466				466	489 506.73			1			1				14			16	27			EXTEND NORTH 38M						
94.77	94.81	MED	46				46	121 140.97			1			1				18			20	27			EXTEND NORTH 90M						
94.54	94.81	OUT	434				434	466 396.24			1			1		7.96	10.66	31			16	27			EXTEND NORTH 47M, REPAIR EROSION AREAS						
94.30	94.41	OUT	178				178	246 247.65			1			1				17			19	27			EXTEND NORTH 83 M						
94.00																						50 35.3	16 13		UNDERPASS, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.						
93.50	94.03	OUT	853				853	921 937.26			1			1		4.57	6.12	26			19	27			EXTEND NORTH 83 M						
93.50	94.03	MED	857				857	938 947.07			1			1		21.50	28.80	58	3	20	27				EXTEND NORTH 96 M AND ADD D.G.C.S. FOR EROSION						
92.25	93.21	MED	1223	321			1544	1529 1318.26			1			1		14.35	19.22	37			12	27			REPLACE EXISTING GUARDRAIL						
93.07	93.19	OUT	202				202	245 430.53			1					4.22	5.65	20			17	27			EXTEND NORTH 54M AND REPAIR EROSION AREAS	186.69					
92.95		OUT															1.20		2						PAVE GUTTER						
92.95	93.03	OUT	129				129	190					1			1.96	2.63	14	3	6					EXTEND NORTH 65 M TO MM 93.07 TO CONNECT WITH PREVIOUS RUN						
91.57	91.65	OUT	92								I														ADD D.G.C.S. FOR EROSION						
91.57	91.61	MED	34								I														RETAIN EXISTING GUARDRAIL						
INTERCHANGE 15																															
RAMP A																															
0+074	0+312	RT		237			237	226			1					4.46	5.98	14	3	12	27				0+312 = MM 91.34 OUT CONNECT TO MAIN LINE						
																									ADD D.G.C.S. FOR EROSION						
RAMP C																															
0+127	0+311	RT																1							REPAIR EROSION AREAS						
0+131	0+312	LT																1							REPAIR EROSION AREAS						
91.54																									BRIDGE *56S OVER FAIRLEE STATE HIGHWAY						
91.51	93.53	MED																							RETAIN EXISTING GUARDRAIL						
91.44	91.53	OUT		120		4							1												REPAIR EXISTING CABLE						
91.23	91.34	OUT		177			177	173 384.81			I			1		4.76	6.37	14							CONNECT TO RAMP A AT STA 0+312						
90.83	90.91	OUT	130				130	185 179.07			1			1				16			18	27			EXTEND NORTH 70M	53.34					
90.57	90.60	OUT	52		3	1	20	70 53.34			1			1				16			18	27			EXTEND NORTH 65M, REPLACE TRAILING TWIST						
90.19	90.25	OUT	84				84	116 83.82			1			1				14			16	27			EXTEND NORTH 47M						
89.50	89.89	MED		628			628	613 621.03			1			1				10			12	27			REPLACE EXISTING GUARDRAIL	34.29					
89.32	89.37	OUT	35								I														RETAIN EXISTING GUARDRAIL						
89.32	89.37	MED	46								I														RETAIN EXISTING GUARDRAIL						
SHEET 18 TOTALS				5993	1913	3	5	0	7547	8330	0	16	0	1	16	0	90.55	123.69	427	15	281	432	50	16							
																				SOUTHBOUND ITEM DETAIL SHEET NO. 3						PROJECT NAME: HARTFORD - NEWBURY PROJECT NUMBER: IM 091-2(67)		FILE NAME: ...\\DGN\\ZA042\\D03.dgn PROJECT LEADER: C.D. LATHROP DESIGNED BY: R. H. BARNES		PLOT DATE: 10/12/2006 DRAWN BY: R. H. BARNES CHECKED BY: E. P. DETRICK SHEET 18 OF 32	

SOUTHBOUND ITEM DETAIL SUMMARY SHEET FOR HARTFORD-NEWBURY IM 091-2(67)



MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77	621.76	621.79	621.80	621.20	621.17	621.505	621.65	621.65	621.52	616.40	616.31	616.47	402.11	301.35	203.15	203.30	620.12	620.21	REMARKS
			STEEL BEAM	CABLE	REPLACE GUARDRAIL BEAM UNIT EA	REPLACE GUARDRAIL POST ASSEMBLY EA	ADJUST HEIGHT OF GUARDRAIL M	REMOVAL AND DISPOSAL M	STEEL BEAM GUARDRAIL (GALV.) M	CABLE GUARDRAIL M	MTS (FLARED) EA	ANCHOR FOR CABLE RAIL EA	ANCHOR FOR CABLE RAIL (MOD) EA	TRAILING END TERMINAL EA	R & R CURB M	BIT. CONCRETE CURB, TYPE B T	B. C. GUTTER & TRAFFIC ISLANDS TON	AGGREGATE SHOULDER, TRUCK CM	SUBBASE OF D. G. C. S. CM	COMMON EXCAVATION CM	EARTH BORROW CM	CHAIN LINK FENCE 1.8M M	BRACING ASSEMBLY CHAIN LINK 1.8M EA	
89.27																								BRIDGE #55S OVER VT 244
89.25	89.27	MED																						RETAIN EXISTING GUARDRAIL
89.22	89.27	OUT	81																					RETAIN EXISTING GUARDRAIL
88.60	88.89	MED		465			465	575 582.93		1				1			20		22	27				EXTEND NORTH 114M
88.44	88.49	MED	79		1		12	69 76.2		1							11		18	27				EXTEND NORTH 69M
88.44	88.47	OUT	50				50	98 99.06		1				1			16		18	27				EXTEND NORTH 63M
87.86	88.02	OUT		252			252	301 304.8		1				1		4.09	5.47	22		17	27			EXTEND NORTH 53M
87.31	87.79	MED		770			770	856 861.06		1				1		2.90	3.89	23		20	27			EXTEND NORTH 90M
87.37	87.41	OUT		66			66	124 125.73		1				1				16		18	27			EXTEND NORTH 62M
87.12	87.19	MED		119			119	104 95.25		1				1				10		12	27			REPLACE EXISTING GUARDRAIL
86.38	86.44	MED		105			105	188 190.5		1				1				18		20	27			EXTEND NORTH 87M
86.18	86.26	OUT		129			129	181 186.69		1				1				15		17	27			EXTEND NORTH 56M
86.17	MED&OUT																				50 53.03	16 13	BRIDGE #54, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.	
86.13	86.25	MED		201			201	275 681.99		1							12		19	27				EXTEND NORTH 74M
85.87	86.07	MED		322			322	415						1		5.24	7.02	23	2	8				EXTEND NORTH 97M TO MM 86.13 TO CONNECT WITH PREVIOUS RUN
85.75	85.78	OUT	50				50	112 114.3		1				1				17		19	27			ADD D.G.C.S. FOR EROSION EXTEND NORTH 77 M
85.74	85.78	MED	66		1		20	84 83.82		1				1				18		20	27			EXTEND NORTH 96M
85.43	85.47	MED	65				12	78 87.63		1								13		20	27			EXTEND NORTH 90M
85.42	85.46	OUT	67		1		12	53 68.58		1								11		18	27			EXTEND NORTH 65M
84.22	84.27	MED	80		2		12	74 140.97		1								12		19	27			EXTEND NORTH 74M, PIERS, SEE SHEET #31 FOR DETAIL
83.37	83.42	MED		56			56	139 144.78		1				1				18		20	27			EXTEND NORTH 87M
83.36	83.40	OUT		58			58	116 118.11		1				1				16		18	27			EXTEND NORTH 62M
83.24	83.28	MED		64			64	142 369.57		1								12		19	27			EXTEND NORTH 78M
83.24	83.27	OUT		56			56	119 121.92		1				1				16		18	27			EXTEND NORTH 67M
83.10	83.18	MED		132			132	225						1				13		8				EXTEND NORTH 97M TO MM 83.24 TO CONNECT WITH PREVIOUS RUN
82.50	82.92	MED		675			675	660 662.94		1				1				10		12	27			REPLACE EXISTING GUARDRAIL
82.76	82.86	OUT		155			155	207 209.55		1				1		3.23	4.32	21		17	27			EXTEND NORTH 56M
82.09	82.21	OUT		127			127	112 118.11		1				1				10		12	27			REPLACE EXISTING GUARDRAIL
81.72	81.77	MED		76			76	165 167.64		1				1				18		20	27			EXTEND NORTH 93M
81.72	81.77	OUT		71			71	129 133.35		1				1				16		18	27			EXTEND NORTH 62M
81.70		MED														1.20		2						PAVE GUTTER
SHEET 19	TOTALS		538	3899	5	0	0	4067	5601	0	24	0	0	20	0	15.46	21.90	407	4	447	648	50	16	
													</											

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT, CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S.	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.60 ANCHOR FOR STEEL BEAM RAIL EA	
			STEEL BEAM	CABLE																						
81.41	81.47	OUT		97			97	164		1				1				16		18	27			EXTEND NORTH 71M		
81.34	81.49	MED		183			183	348		1				1				19		21	27			EXTEND NORTH 103M, CONNECT EXISTING RUNS MM 81.34-81.49 MED		
								350.52																		
80.66	80.74	OUT		125			125	184		1				1		5.16	6.91	25		18	27			EXTEND NORTH 63M		
80.25	80.38	OUT	216				216	266		1				1				16		18	27			EXTEND NORTH 65M	I	
								262.89																		
80.25	80.28	MED	34								I													RETAIN EXISTING GUARDRAIL		
80.25		MED	12																					GUARDRAIL ACROSS ENDS OF BRIDGES TO REMAIN		
80.22																								BRIDGE #51S OVER TH NO. 3		
80.20		MED	12																					GUARDRAIL ACROSS ENDS OF BRIDGES TO REMAIN		
80.16	80.19	MED																						RETAIN EXISTING GUARDRAIL		
79.95	80.19	OUT	384				382	378						1				5						REPLACE EXISTING GUARDRAIL	I	
								377.99																		
79.64	79.70	MED		103			103	198		1				1				19		21	27			EXTEND NORTH 99M		
								201.93																		
79.11	79.25	OUT		215			215	264		1				1				15		17	27			EXTEND NORTH 53M		
								266.7																		
78.89	79.31	MED		640			640	727		1								13		20	27			EXTEND NORTH 87M	COMBINE RUNS	
								1234.44																		
78.57	78.82	MED		410			410	519						1		10.24	13.72	34	2	10				EXTEND NORTH 113M TO MM 78.84 TO CONNECT WITH PREVIOUS RUN, PAVE GUTTER		
78.59	78.79	OUT		313			313	371		1				1				16		18	27			EXTEND NORTH 62M		
								358.14																		
78.32	78.42	MED		145			145	229		1								12		19	27			EXTEND NORTH 84M		
								228.6																		
78.23	78.36	OUT	203				203	217		1				1				13		18	27			EXTEND NORTH 29M		
								251.46																		
78.22	78.25	MED	65				65	174		I				1				15		10				EXTEND NORTH 113M TO MM 78.32 TO CONNECT WITH PREVIOUS RUN		
								140.97																		
77.89	77.97	MED		122			122	196		1				1		2.37	3.17	21		19	27			EXTEND NORTH 78 M		
								137.16																		
77.85	77.92	OUT		109			109	168		1								10		17	27			EXTEND NORTH 59M	COMBINE RUNS	
								335.28																		
77.73	77.79	OUT		70			70	163						1			1.20	13	2	8				EXTEND NORTH 97M TO MM 77.85 TO CONNECT WITH PREVIOUS RUN, PAVE GUTTER		
77.50	77.83	MED		466			466	509		1						9.09	12.17	26		16	27			MAKE ONE CONTINUOUS SEGMENT MM 77.50-77.83	COMBINE RUNS	
								716.28																		
77.37	77.45	MED		125			125	202						1				12		7				EXTEND NORTH 81 M TO MM 77.50 TO CONNECT WITH PREVIOUS RUN		
77.07	MED&OUT																					-50- 63.3	-16- 14	BRIDGE #50, CONSTRUCT CHAIN LINK FENCE FOR UNDERPASS MED. AND OUT.		
77.08	77.25	OUT		279			279	346		1				1				16		18	27			EXTEND NORTH 71M		
								346.71																		
77.00	77.20	MED		331			331	401		1				1				17		19	27			EXTEND NORTH 74M		
								400.05																		
76.56	76.76	OUT		221			221	288		1				1				16		18	27			EXTEND NORTH 71M		
								293.37																		
SHEET 20	TOTALS		926	3954	0	0	0	4820	631.2	0	16	0	0	17	0	26.86	37.17	349	4	330	432	50	16			

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.52 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S.	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.60			
			STEEL BEAM	CABLE																					ANCHOR FOR STEEL BEAM RAIL EA			
75.87	75.93	OUT	55		2						I														REPAIR EXISTING GUARDRAIL			
75.87	75.91	MED	34								I															RETAIN EXISTING GUARDRAIL		
75.84																										BRIDGE *49S OVER U.S. 5		
75.74		OUT														1.20		2								PAVE GUTTER		
75.79	75.83	MED																										
75.57		OUT																										
75.49	75.83	OUT	538				538	534 697.23						1		9.44	12.64	23								LEADING END TO START AT BRIDGE ABUTMENT, OUTSIDE BRIDGE APPROACH RAIL SO OVERLAP OCCURS	I	
75.40	75.46	OUT	75				75	151						1		1.32	1.76	12		5						EXTEND NORTH 49 M TO MM 75.49 TO CONNECT WITH PREVIOUS RUN. EXTEND SOUTH 31 M	COMBINE RUNS	
74.90	74.93	OUT	35											I												RETAIN EXISTING GUARDRAIL		
74.90	74.92	MED	37		1						I															REPAIR EXISTING GUARDRAIL		
74.83																										BRIDGE *48S OVER VT 10A		
74.80	74.83	MED																								RETAIN EXISTING GUARDRAIL		
74.65	74.83	OUT	272				268	264 259.08						1		5.89	7.88	16									REPLACE EXISTING GUARDRAIL	
INTERCHANGE 13																												
RAMP B																												
0+017	0+226	RT												209													REMOVE AND RESET GRANITE CURB	
0+162		RT														1.20		2									PAVE GUTTER	
0+017	0+093	LT															3										REPAIR ERODED AREAS	
RAMP D																												
0+110	0+209	RT		99			99	84 83.82			1			1		1.59	2.12	13		12	27						REPLACE EXISTING GUARDRAIL	
73.58	73.95	OUT	599				599	587 822.96			1			1		6.69	8.96	23		12	27						REPLACE EXISTING GUARDRAIL	COMBINE RUNS
73.71	73.79	MED	120				120	209 213.36			1			1				19		20	27						EXTEND NORTH 93 M, REPAIR EROSION AREAS	
73.37	73.51	MED	198				198	277 281.94			1			1				17		19	27						EXTEND NORTH 83 M	
73.31	73.54	OUT	335				335	396						1		5.24	7.02	21		6							EXTEND NORTH 65 M TO MM 73.58 TO CONNECT WITH PREVIOUS RUN	
73.13																											BRIDGE *47S OVER U.S. 5	
73.00	73.09	OUT	144		4						I																RETAIN EXISTING GUARDRAIL	
73.00	73.05	MED	58								I																RETAIN EXISTING GUARDRAIL	
72.94	72.97	MED																									RETAIN EXISTING GUARDRAIL	
72.84	72.97	OUT	209		6	2																						
SHEET 21	TOTALS		844	1964	13	2	0	2232	2502	0	4	0	0	8	209	30.17	42.78	147	4	74	108	0	0					

MILE MARKER	MILE MARKER	POS.	EXISTING GUARDRAIL (M)		621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.76 REPLACE GUARDRAIL POST ASSEMBLY EA	621.79 ADJUST HEIGHT OF GUARDRAIL M	621.80 REMOVAL AND DISPOSAL M	621.20 STEEL BEAM GUARDRAIL (GALV.) M	621.17 CABLE GUARDRAIL M	621.505 MTS (FLARED) EA	621.65 ANCHOR FOR CABLE RAIL EA	621.65 ANCHOR FOR CABLE RAIL (MOD) EA	621.60 TRAILING END TERMINAL EA	616.40 R & R CURB M	616.31 BIT. CONCRETE CURB, TYPE B T	616.47 B. C. GUTTER & TRAFFIC ISLANDS TON	402.11 AGGREGATE SHOULDERS, TRUCK CM	301.35 SUBBASE OF D. G. C. S. CM	203.15 COMMON EXCAVATION CM	203.30 EARTH BORROW CM	620.12 CHAIN LINK FENCE 1.8M M	620.21 BRACING ASSEMBLY CHAIN LINK 1.8M EA	REMARKS	621.505 MTS (TANGENT) EA	621.60 ANCHOR FOR STEEL BEAM RAIL EA		
			STEEL BEAM	CABLE																								
72.60	72.73	OUT	209		5	1	20				I													REPAIR EXISTING GUARDRAIL		I		
72.32	72.35	MED	52				52	137 133.35			1			1				17		23	27				INSTALL NEW GUARDRAIL. SEE SHEET #31 FOR DETAILS.			
72.01																									BRIDGE #45S OVER WILDER STATE HIGHWAY			
71.91	71.97	OUT	103																						RETAIN EXISTING GUARDRAIL		I	
71.91	71.94	MED	105								I														RETAIN EXISTING GUARDRAIL		I	
71.85	71.88	OUT																							RETAIN EXISTING GUARDRAIL			
71.84	71.88	MED																							RETAIN EXISTING GUARDRAIL			
71.76		MED															1.20		2						PAVE GUTTER			
INTERCHANGE 12																												
RAMP B 0+004	0+045	RT	40				8	38 38.1			I			1				8		3						EXTEND SOUTH 34 M, REPLACE TRAILING END UNIT		
RAMP D 0+118	0+344	RT	200		3	2	31	12			1						1.20	5	2	12	27					PAVE GUTTER, REPLACE EXISTING MTS		
0+107		RT															1.20		2							PAVE GUTTER		
0+161		RT															1.20		2							PAVE GUTTER, REPAIR SINK HOLE		
71.27	71.57	MED	483		48	5	12	81 80.01			1			I				12	6	19	27					EXTEND NORTH 81 M		
71.24		MED															1.20		2							PAVE GUTTER		
71.21		OUT															1.20		2							PAVE GUTTER		
71.19		MED															1.20		2							PAVE GUTTER		
71.09		MED															1.20		2							PAVE GUTTER		
71.08		MED									I															RETAIN EXISTING BRIDGE APPROACH RAIL		
71.07	71.28	OUT	64																							RETAIN EXISTING BRIDGE APPROACH RAIL		I
70.53	70.73	MED	206				206	312 320.04			1			1				26		22	27					EXTEND NORTH 121 M, REPAIR EROSION AREAS		
70.24 70.34	70.29 70.38	MED MED	85				85	117 125.73			1			1				14		16	27					EXTEND NORTH 47 M		
INTERCHANGE 11																												
RAMP A 0+544	0+591	RT	47					60.96			I															RETAIN EXISTING GUARDRAIL		
0+240	0+500	RT													260											REMOVE AND RESET GRANITE CURB		
0+200	0+470	LT													270											REMOVE AND RESET GRANITE CURB		
SHEET 22 TOTALS				1594	0	56	8	51	375	685	0	5	0	0	4	530	0.00	9.60	82	22	95	135	0	0				
																						</						

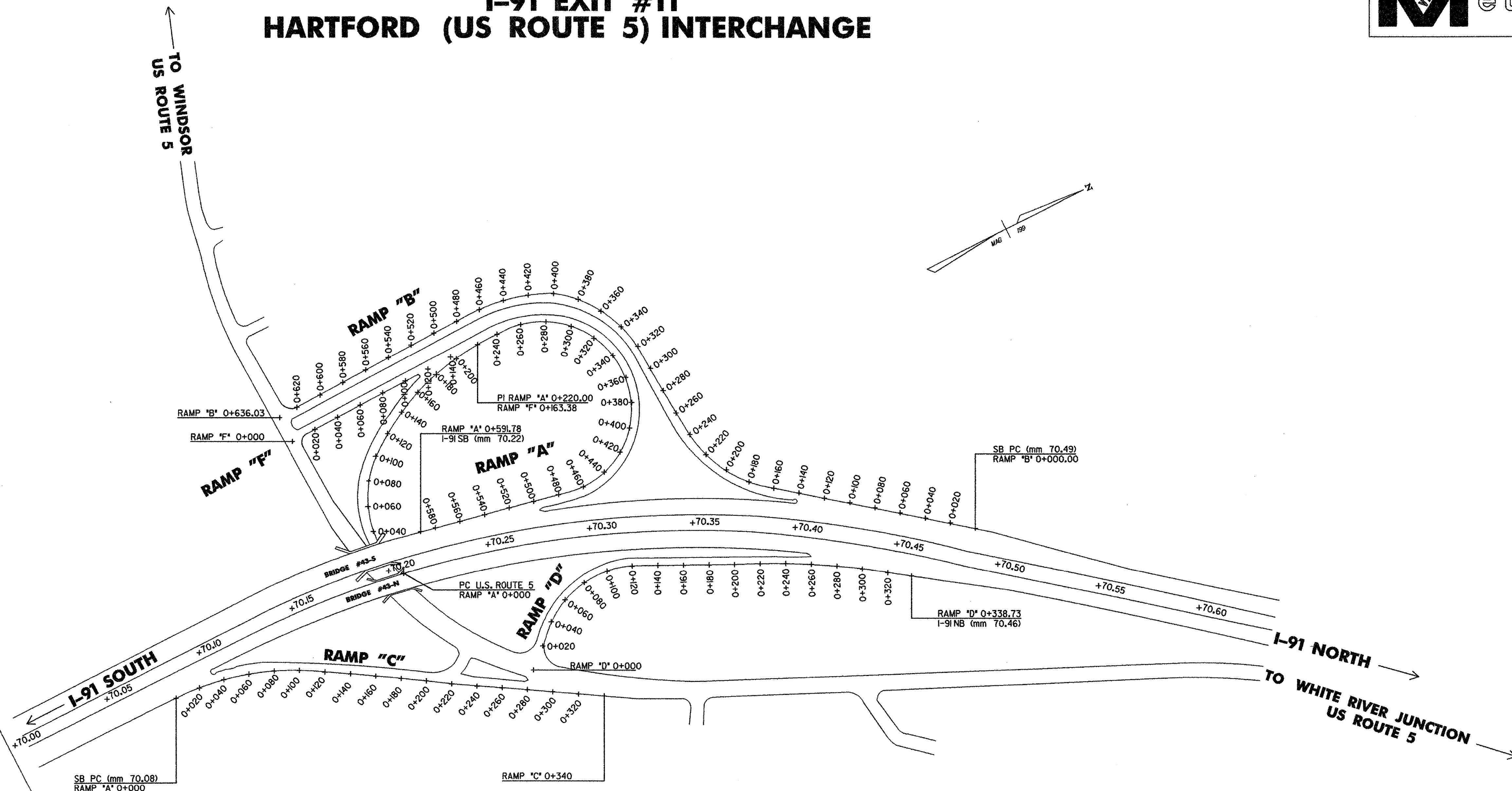
I-91 EXIT #11 HARTFORD (US ROUTE 5) INTERCHANGE

NORTHBOUND RAMP

REMOVING AND RESETTNG CURB

RAMP "D" 0+021 - 0+120 RT (60M)

BEGIN PROJECT
HARTFORD - NEWBURY
IM 091-2(67)
MM 69.96



SOUTHBOUND RAMP

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "B" 0+150 - 0+225 RT (75M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "B" 0+138 - 0+221 RT (83M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "B" 0+138 RT (1 EA)

TRAILING END TERMINAL

RAMP "B" 0+221 RT (1 EA)

REMOVING AND RESETTNG CURB

RAMP "A" 0+240 - 0+500 RT (260M)
RAMP "A" 0+200 - 0+470 LT (270M)
RAMP "B" 0+140 - 0+260 RT (120M)
RAMP "B" 0+140 - 0+160 LT (28M)
RAMP "B" 0+340 - 0+621 LT (300M)
RAMP "F" 0+010 - 0+150 LT (140M)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

RAMP "B" 0+620 LT (1.00T)

AGGREGATE SHOULDERS

RAMP "B" 0+150 - 0+225 RT (11.88 CM)

SUBBASE OF DENSE GRADED CRUSHED STONE

RAMP "B" 0+150 - 0+225 RT (2 CM)
RAMP "B" 0+620 LT (2 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

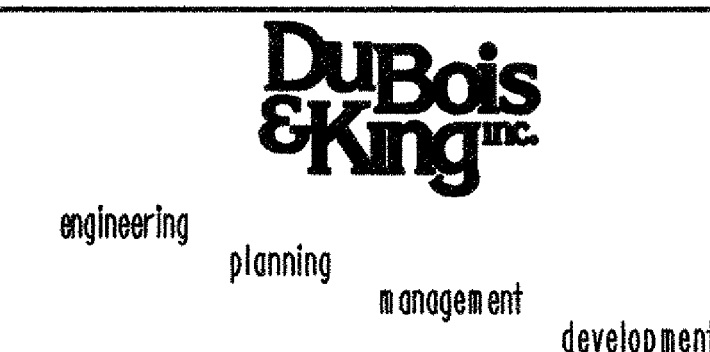
621.17 CABLE GUARDRAIL
621.20 STEEL BEAM GUARDRAIL(GALVANIZED)
621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
621.505 MANUFACTURED TERMINAL SECTION (FLARED)
621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
621.52 TRAILING END TERMINAL
621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
621.65 ANCHOR FOR CABLE RAIL
621.65 ANCHOR FOR CABLE RAIL (MOD)

NOTES

- REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
- MILE MARKER INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

**INTERCHANGE
NO. 11
LAYOUT SHEET**



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\z042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 24 OF 32

I-91 EXIT #12 WILDER (TO US ROUTE 5) INTERCHANGE

NORTHBOUND RAMPS

REPLACE GUARDRAIL BEAM UNIT

RAMP "A" 0+254 - 0+417 RT (10 EA)
RAMP "C" 0+006 - 0+376 RT (7 EA)

REPLACE GUARDRAIL POST ASSEMBLY

RAMP "A" 0+254 - 0+417 RT (7 EA)
RAMP "C" 0+006 - 0+376 RT (6 EA)

ADJUST GUARDRAIL HEIGHT

RAMP "A" 0+254 - 0+417 RT (20M)
RAMP "C" 0+006 - 0+376 RT (50M)

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "A" 0+254 - 0+417 RT (11M)
RAMP "C" 0+006 - 0+376 RT (23M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "C" 0+006 - 0+376 RT (115M)

MANUFACTURED TERMINAL SECTION (FLARED)

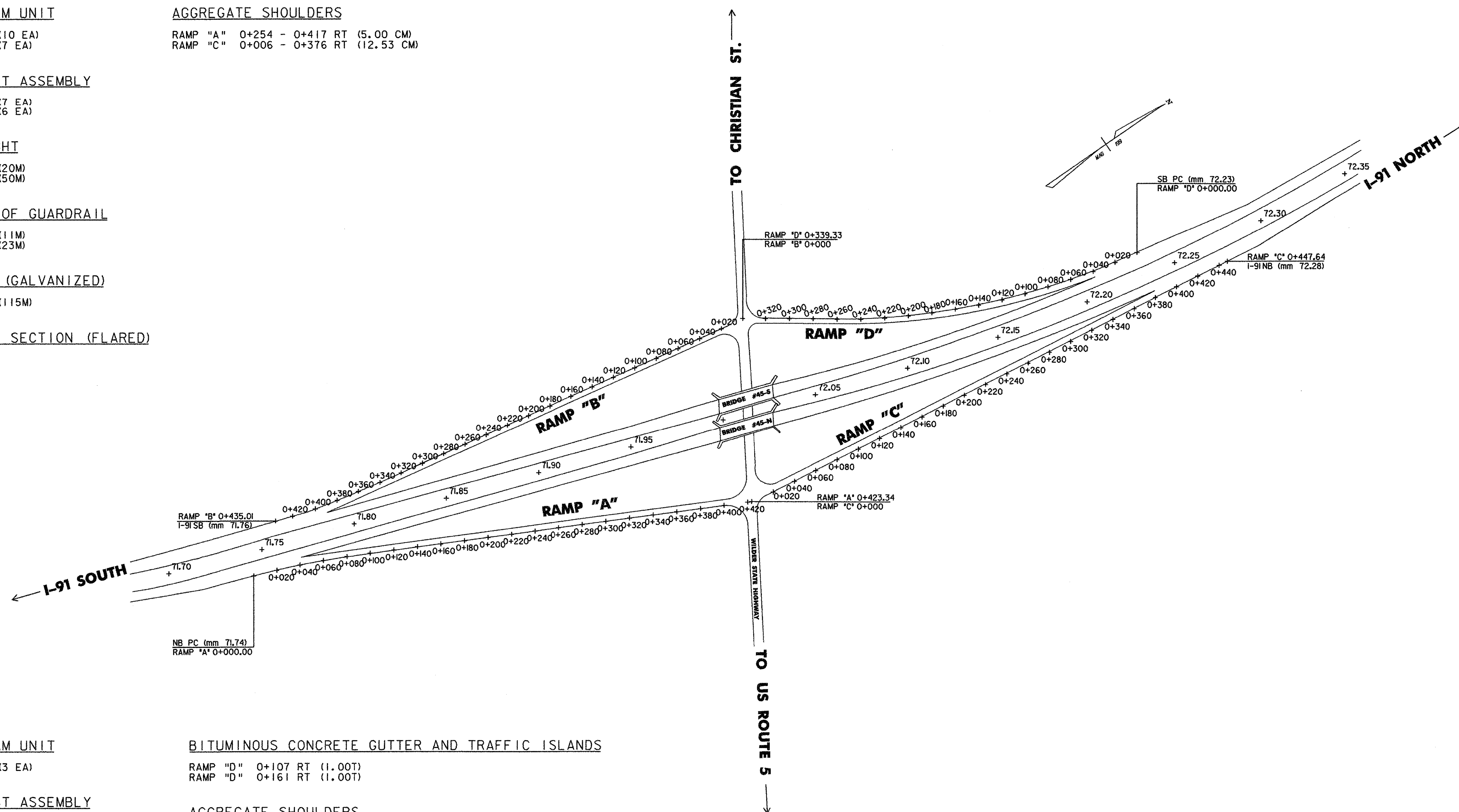
RAMP "A" 0+254 RT (1 EA)

TRAILING END TERMINAL

RAMP "C" 0+139 RT (1 EA)

AGGREGATE SHOULDERS

RAMP "A" 0+254 - 0+417 RT (5.00 CM)
RAMP "C" 0+006 - 0+376 RT (12.53 CM)



SOUTHBOUND RAMPS

REPLACE GUARDRAIL BEAM UNIT

RAMP "D" 0+118 - 0+334 RT (3 EA)

REPLACE GUARDRAIL POST ASSEMBLY

RAMP "D" 0+118 - 0+334 RT (2 EA)

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "B" 0+037 - 0+045 RT (8M)
RAMP "D" 0+118 - 0+130 RT (12M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "B" 0+037 - 0+075 RT (38M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "D" 0+118 RT (1 EA)

TRAILING END TERMINAL

RAMP "B" 0+071 RT (1 EA)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

RAMP "D" 0+107 RT (1.00T)
RAMP "D" 0+161 RT (1.00T)

AGGREGATE SHOULDERS

RAMP "B" 0+004 - 0+045 RT (7.78 CM)
RAMP "D" 0+118 - 0+344 RT (5.00 CM)

SUBBASE OF DENSE GRADED CRUSHED STONE

RAMP "D" 0+107 RT (2 CM)
RAMP "D" 0+161 RT (2 CM)
RAMP "D" 0+188 - 0+344 RT (2 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

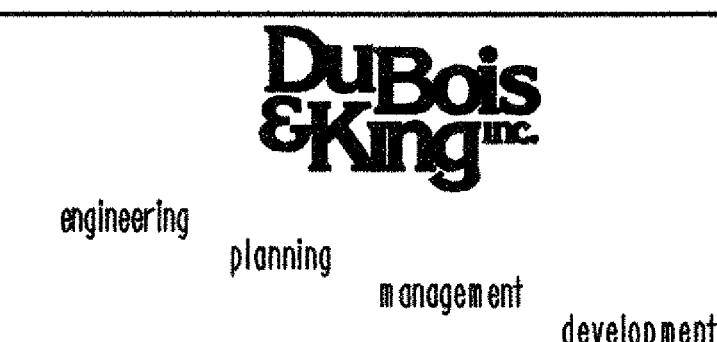
621.17 CABLE GUARDRAIL
621.20 STEEL BEAM GUARDRAIL (GALVANIZED)
621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
621.505 MANUFACTURED TERMINAL SECTION (FLARED)
621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
621.52 TRAILING END TERMINAL
621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
621.65 ANCHOR FOR CABLE RAIL
621.65 ANCHOR FOR CABLE RAIL (MOD)

NOTES

1. REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
2. MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

INTERCHANGE
NO. 12
LAYOUT SHEET



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\z042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 25 OF 32

I-91 EXIT #13 NORWICH (US ROUTE 5 & VT ROUTE 10A) INTERCHANGE

NORTHBOUND RAMPS

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "A" 0+088 - 0+328 RT (243M)
RAMP "C" 0+188 - 0+351 RT (151M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "A" 0+088 - 0+328 RT (228M)
RAMP "C" 0+188 - 0+351 RT (140M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "A" 0+088 RT (1 EA)
RAMP "C" 0+188 RT (1 EA)

TRAILING END TERMINAL

RAMP "A" 0+328 RT (1 EA)

BITUMINOUS CONCRETE CURB, TYPE B

RAMP "A" 0+088 - 0+328 RT (6.05T)
RAMP "C" 0+188 - 0+351 RT (4.06T)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

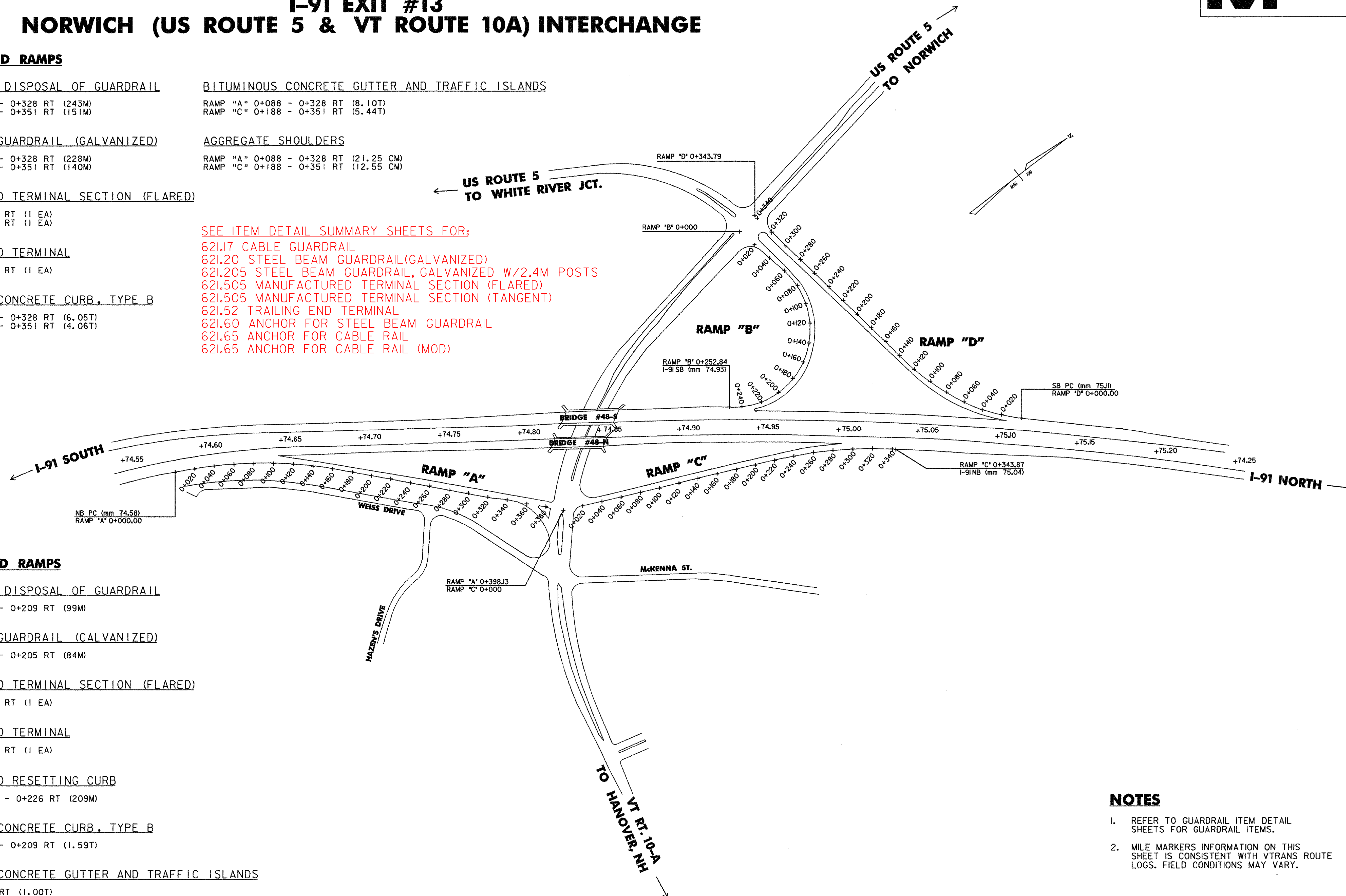
RAMP "A" 0+088 - 0+328 RT (8.10T)
RAMP "C" 0+188 - 0+351 RT (5.44T)

AGGREGATE SHOULDERS

RAMP "A" 0+088 - 0+328 RT (21.25 CM)
RAMP "C" 0+188 - 0+351 RT (12.55 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

621.17 CABLE GUARDRAIL
621.20 STEEL BEAM GUARDRAIL(GALVANIZED)
621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
621.505 MANUFACTURED TERMINAL SECTION (FLARED)
621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
621.52 TRAILING END TERMINAL
621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
621.65 ANCHOR FOR CABLE RAIL
621.65 ANCHOR FOR CABLE RAIL (MOD)



SOUTHBOUND RAMPS

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "D" 0+110 - 0+209 RT (99M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "D" 0+121 - 0+205 RT (84M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "D" 0+121 RT (1 EA)

TRAILING END TERMINAL

RAMP "D" 0+209 RT (1 EA)

REMOVING AND RESETTNG CURB

RAMP "B" 0+017 - 0+226 RT (209M)

BITUMINOUS CONCRETE CURB, TYPE B

RAMP "D" 0+110 - 0+209 RT (1.59T)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

RAMP "B" 0+162 RT (1.00T)
RAMP "D" 0+110 - 0+209 RT (2.12T)

AGGREGATE SHOULDERS

RAMP "B" 0+017 - 0+093 LT (3.00 CM)
RAMP "D" 0+110 - 0+209 RT (12.95 CM)

SUBBASE OF DENSE GRADED CRUSHED STONE

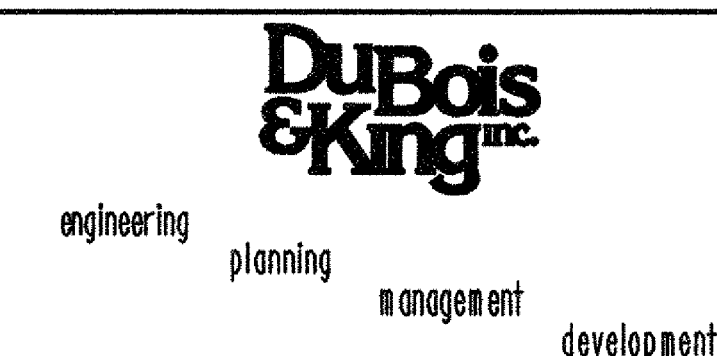
RAMP "B" 0+162 RT (2 CM)

NOTES

1. REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
2. MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

INTERCHANGE
NO. 13
LAYOUT SHEET



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\z042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP

PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 26 OF 32

I-91 EXIT #14 THETFORD (VT ROUTE 113) INTERCHANGE

NORTHBOUND RAMP

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "D" 0+334 - 0+376 RT (42M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "D" 0+334 - 0+376 RT (27M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "D" 0+334 RT (1 EA)

TRAILING END TERMINAL

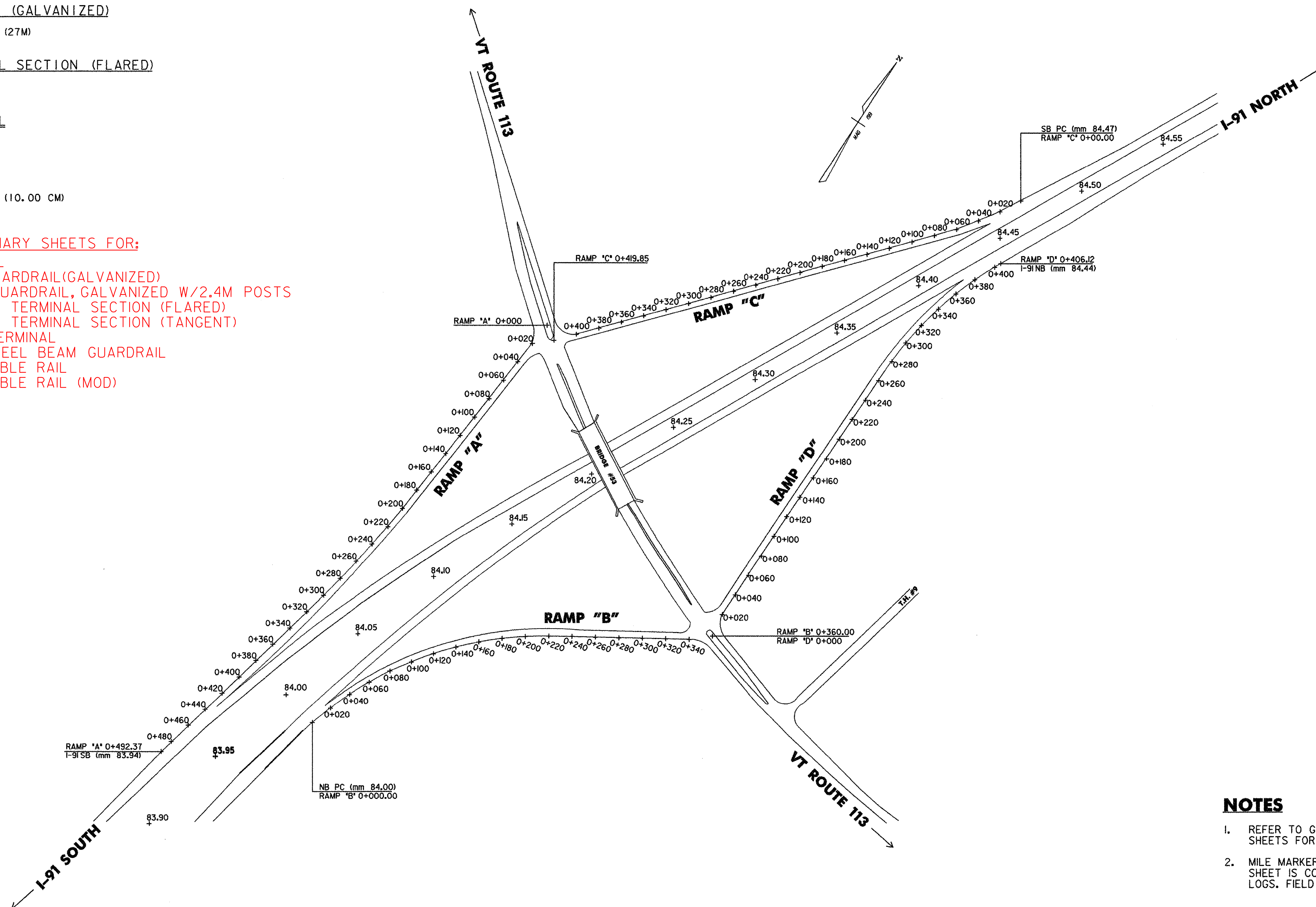
RAMP "D" 0+376 RT (1 EA)

AGGREGATE SHOULDERS

RAMP "D" 0+334 - 0+376 RT (10.00 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

- 621.17 CABLE GUARDRAIL
- 621.20 STEEL BEAM GUARDRAIL(GALVANIZED)
- 621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
- 621.505 MANUFACTURED TERMINAL SECTION (FLARED)
- 621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
- 621.52 TRAILING END TERMINAL
- 621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
- 621.65 ANCHOR FOR CABLE RAIL
- 621.65 ANCHOR FOR CABLE RAIL (MOD)



NOTES

1. REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
2. MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

INTERCHANGE
NO. 14
LAYOUT SHEET

DuBois & King
INC.
engineering planning management development

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\z0042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 27 OF 32

I-91 EXIT #15 FAIRLEE INTERCHANGE

NORTHBOUND RAMP

REPLACE GUARDRAIL POST ASSEMBLY

RAMP "D" 0+027 - 0+295 RT (20 EA)

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "B" 0+000 - 0+218 RT (218M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "B" 0+000 - 0+218 RT (214M)

TRAILING END TERMINAL

RAMP "B" 0+218 RT (1 EA)

BITUMINOUS CONCRETE CURB, TYPE B

RAMP "B" 0+000 - 0+218 RT (4.97T)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

RAMP "B" 0+000 - 0+218 RT (6.66T)

AGGREGATE SHOULDERS

RAMP "B" 0+000 - 0+218 RT (14.25 CM)

SOUTHBOUND RAMP

REMOVAL AND DISPOSAL OF GUARDRAIL

RAMP "A" 0+074 - 0+312 RT (237M)

STEEL BEAM GUARDRAIL (GALVANIZED)

RAMP "A" 0+086 - 0+312 RT (226M)

MANUFACTURED TERMINAL SECTION (FLARED)

RAMP "A" 0+086 RT (1 EA)

BITUMINOUS CONCRETE CURB, TYPE B

RAMP "A" 0+074 - 0+312 RT (4.46T)

BITUMINOUS CONCRETE GUTTER AND TRAFFIC ISLANDS

RAMP "A" 0+074 - 0+312 RT (5.98T)

AGGREGATE SHOULDERS

RAMP "A" 0+074 - 0+312 RT (13.30 CM)

RAMP "C" 0+127 - 0+311 RT (1.00 CM)

RAMP "C" 0+131 - 0+312 LT (1.00 CM)

SUBBASE OF DENSE GRADED CRUSHED STONE

RAMP "A" 0+074 - 0+312 RT (3 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

621.17 CABLE GUARDRAIL

621.20 STEEL BEAM GUARDRAIL(GALVANIZED)

621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS

621.505 MANUFACTURED TERMINAL SECTION (FLARED)

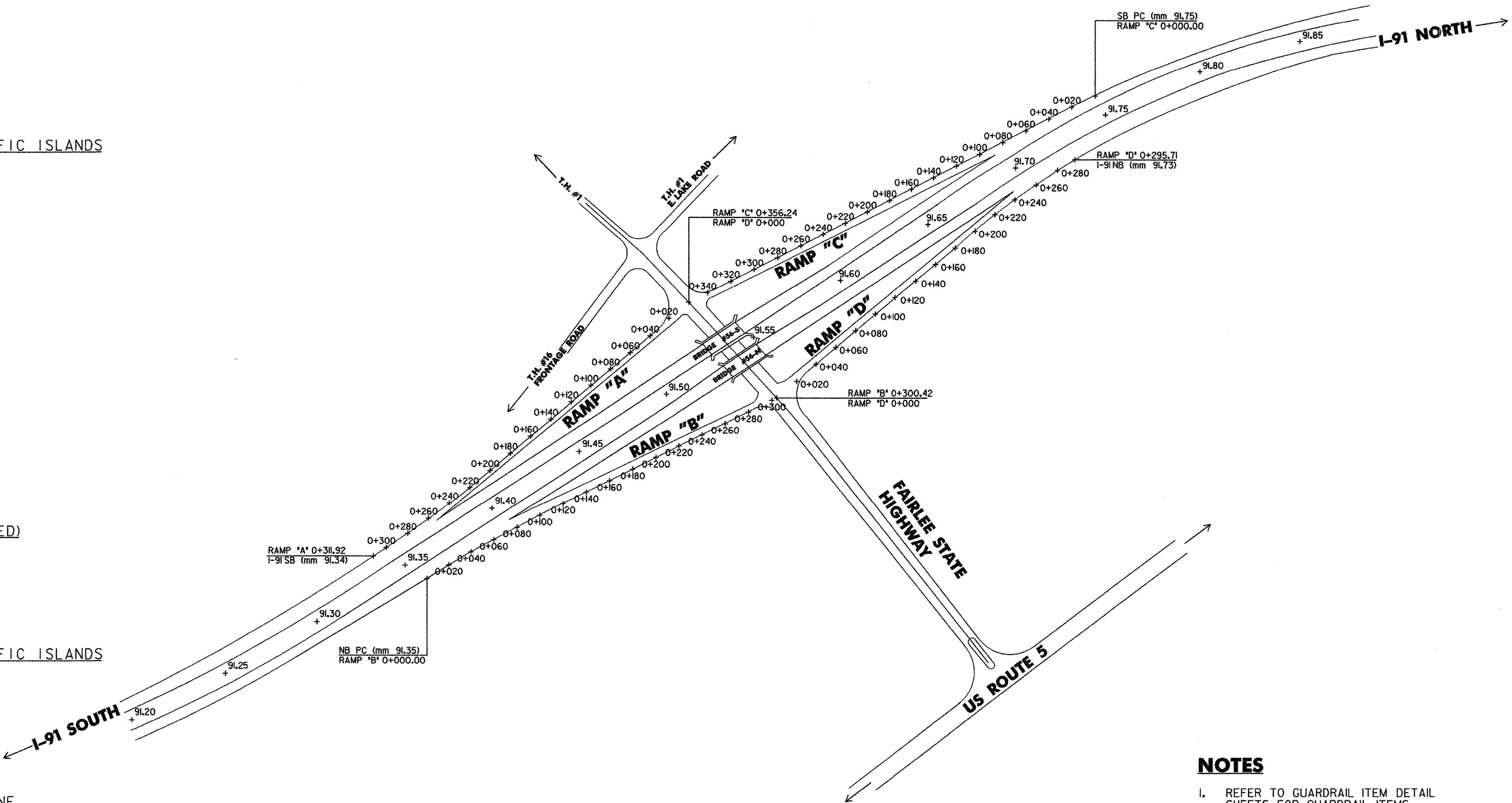
621.505 MANUFACTURED TERMINAL SECTION (TANGENT)

621.52 TRAILING END TERMINAL

621.60 ANCHOR FOR STEEL BEAM GUARDRAIL

621.65 ANCHOR FOR CABLE RAIL

621.65 ANCHOR FOR CABLE RAIL (MOD)



NOTES

- REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
- MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

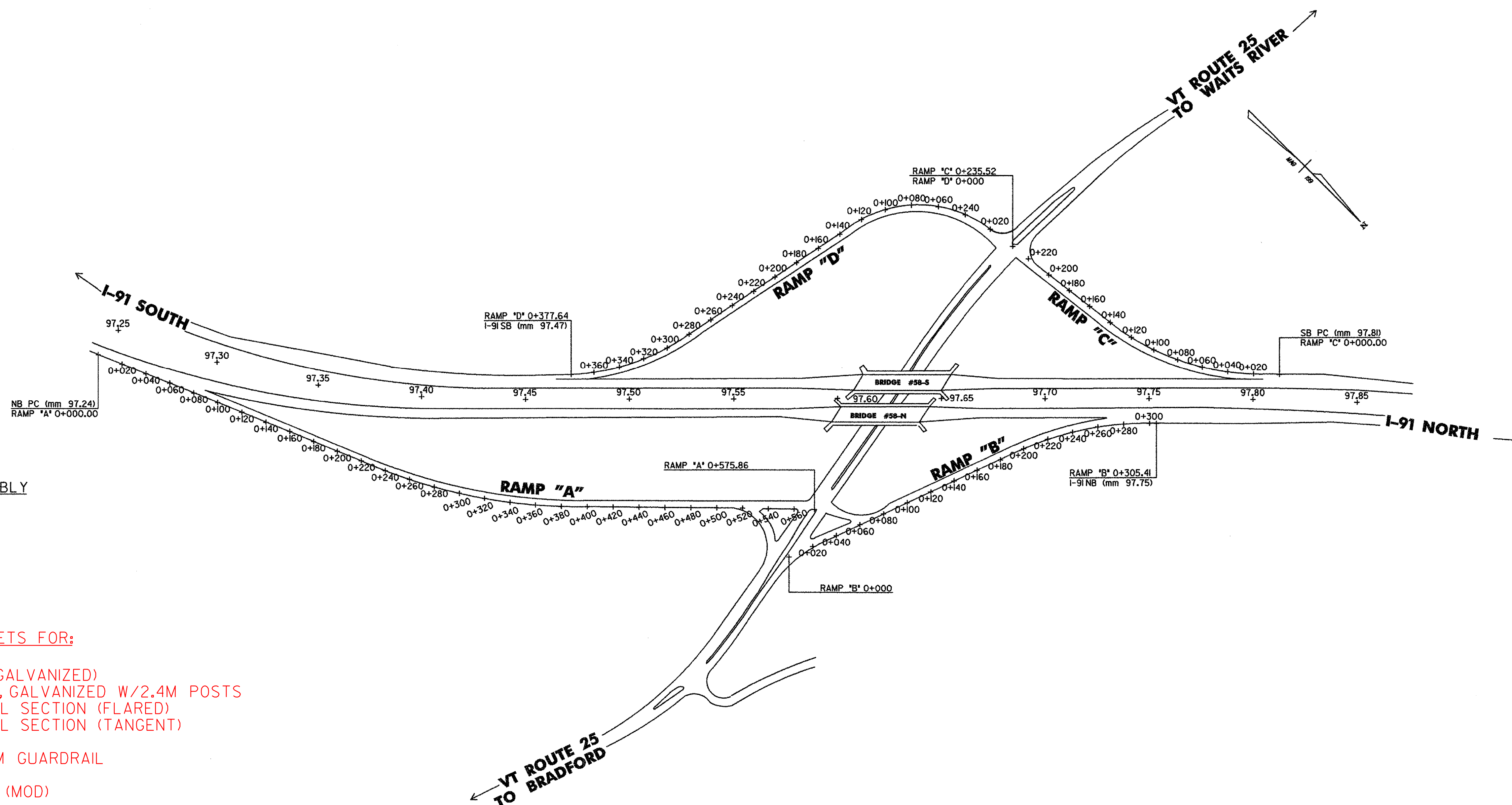
INTERCHANGE
NO. 15
LAYOUT SHEET



PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\z042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 28 OF 32

I-91 EXIT #16 BRADFORD (VT ROUTE 25) INTERCHANGE



SOUTHBOUND RAMPS

REPLACE GUARDRAIL POST ASSEMBLY

RAMP "D" 0+133 - 0+325 LT (3 EA)
RAMP "D" 0+133 - 0+350 RT (7 EA)

AGGREGATE SHOULDERS

RAMP "D" 0+133 - 0+350 RT (7.00 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

62I.17 CABLE GUARDRAIL
62I.20 STEEL BEAM GUARDRAIL(GALVANIZED)
62I.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
62I.505 MANUFACTURED TERMINAL SECTION (FLARED)
62I.505 MANUFACTURED TERMINAL SECTION (TANGENT)
62I.52 TRAILING END TERMINAL
62I.60 ANCHOR FOR STEEL BEAM GUARDRAIL
62I.65 ANCHOR FOR CABLE RAIL
62I.65 ANCHOR FOR CABLE RAIL (MOD)

NOTES

1. REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
2. MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

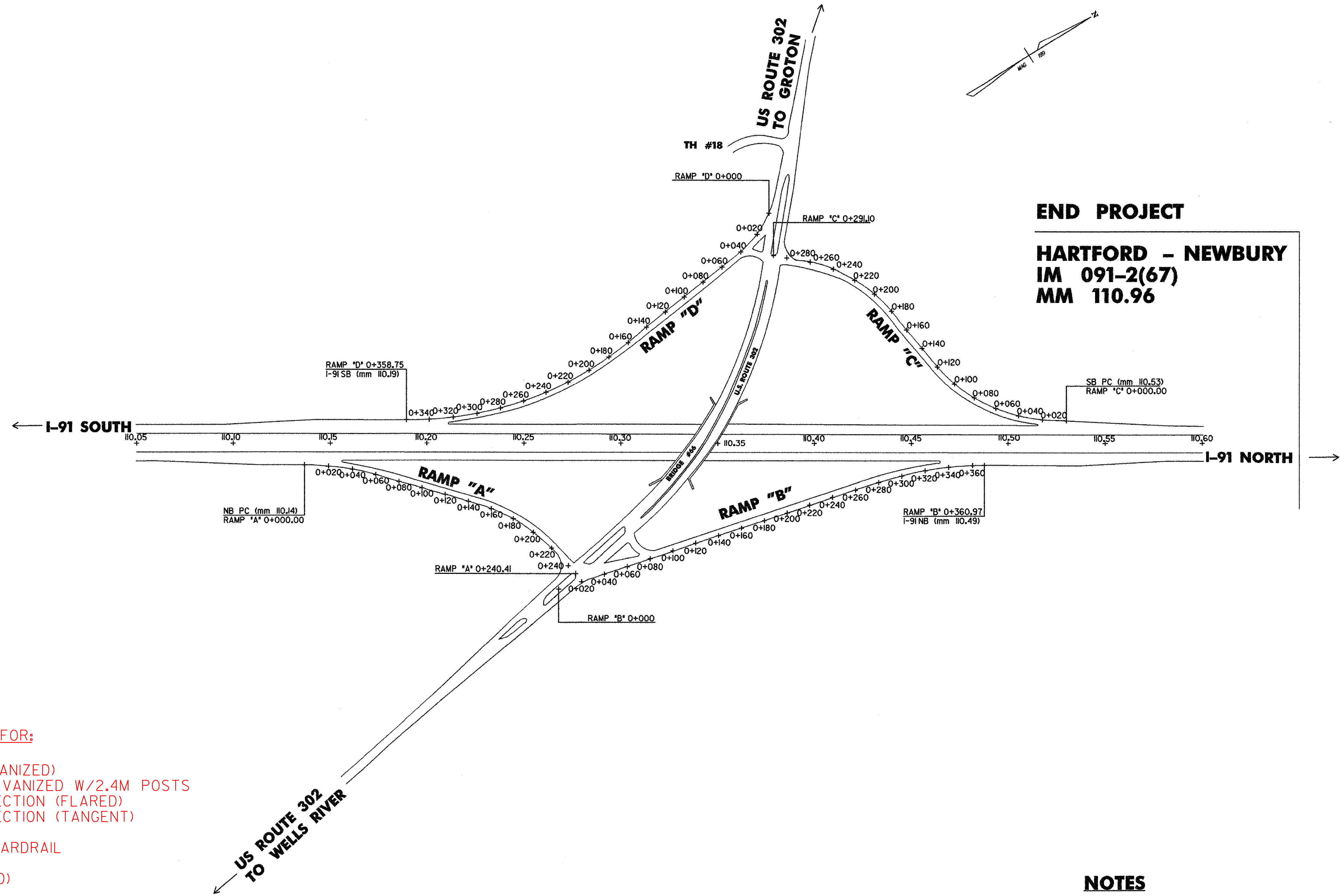
**INTERCHANGE
NO. 16
LAYOUT SHEET**

DuBois & King
INC.
engineering planning management development

PROJECT NAME: HARTFORD - NEWBURY
PROJECT NUMBER: IM 09I-2(67)

FILE NAME: ...\\DGN\\z042LA01.dgn
PROJECT LEADER: C.D. LATHROP
DESIGNED BY: C.D. LATHROP
PLOT DATE: 09/25/2006
DRAWN BY: R. H. BARNES
CHECKED BY: E.P. DETRICK
SHEET 29 OF 32

I-91 EXIT #17
WELLS RIVER (US ROUTE 302) INTERCHANGE



SOUTHBOUND RAMPS

AGGREGATE SHOULDERS

RAMP "C" 0+000 - 0+291 RT< (5.00 CM)
RAMP "D" 0+000 - 0+359 RT< (7.00 CM)

SEE ITEM DETAIL SUMMARY SHEETS FOR:

- 621.17 CABLE GUARDRAIL
- 621.20 STEEL BEAM GUARDRAIL (GALVANIZED)
- 621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
- 621.505 MANUFACTURED TERMINAL SECTION (FLARED)
- 621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
- 621.52 TRAILING END TERMINAL
- 621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
- 621.65 ANCHOR FOR CABLE RAIL
- 621.65 ANCHOR FOR CABLE RAIL (MOD)

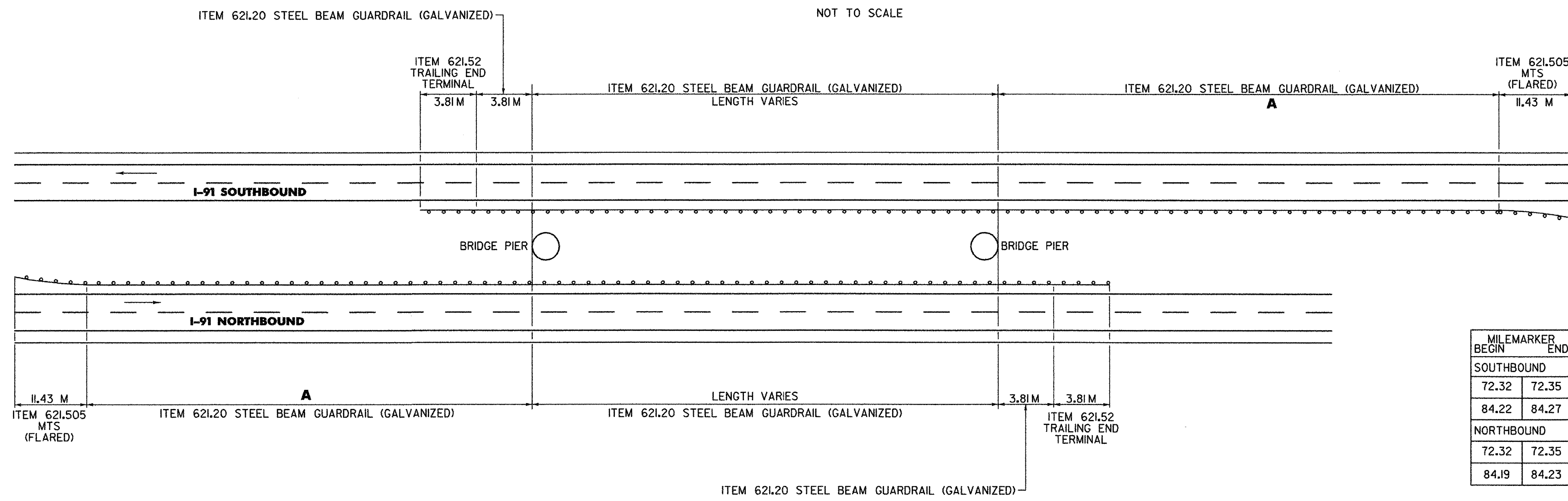
NOTES

- REFER TO GUARDRAIL ITEM DETAIL SHEETS FOR GUARDRAIL ITEMS.
- MILE MARKERS INFORMATION ON THIS SHEET IS CONSISTENT WITH VTRANS ROUTE LOGS. FIELD CONDITIONS MAY VARY.

NOT TO SCALE

INTERCHANGE NO. 17 LAYOUT SHEET	 engineering planning management development	PROJECT NAME: HARTFORD - NEWBURY	
		PROJECT NUMBER: IM 091-2(67)	
		FILE NAME: ...\\DGN\\z042LA01.dgn	
		PLOT DATE: 09/25/2006	
		PROJECT LEADER: C.D. LATHROP	
		DRAWN BY: R. H. BARNES	
		DESIGNED BY: C.D. LATHROP	
		CHECKED BY: E.P. DETRICK	
SHEET 30 OF 32			

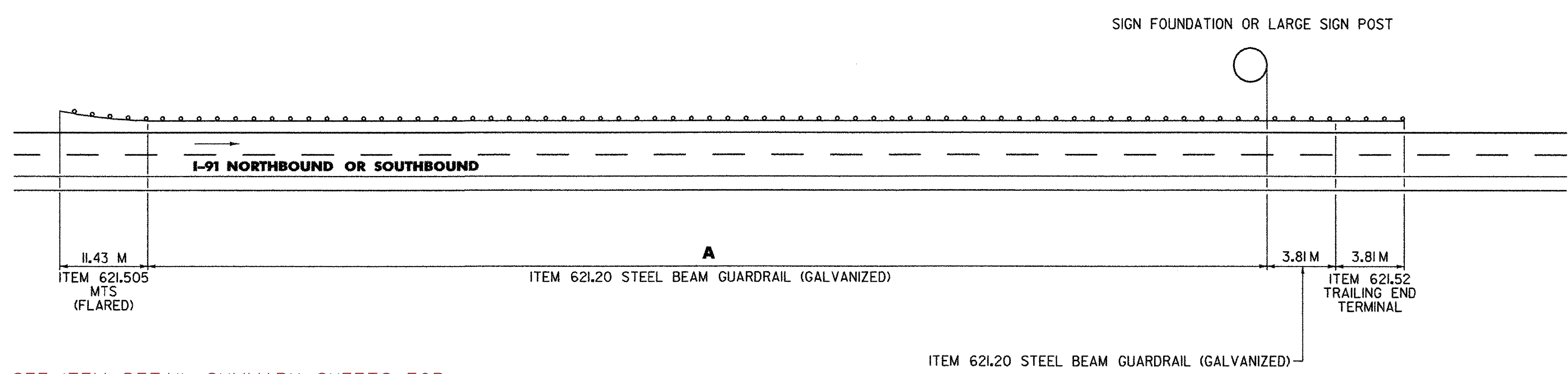
GUARDRAIL LOCATIONS—OVERPASSES



MILEMARKER BEGIN END		A
SOUTHBOUND		
72.32	72.35	
84.22	84.27	123 M
NORTHBOUND		
72.32	72.35	118 M
84.19	84.23	126 M

GUARDRAIL LOCATIONS—SIGN FOUNDATION

NOT TO SCALE



MILEMARKER BEGIN END		LOC.	A		
NORTHBOUND					
69.96	69.98			MED	57 M
SOUTHBOUND					
70.24	70.29	MED	84 M		
70.03	70.04	MED	82 M		

SEE ITEM DETAIL SUMMARY SHEETS FOR:

- 621.17 CABLE GUARDRAIL
- 621.20 STEEL BEAM GUARDRAIL (GALVANIZED)
- 621.205 STEEL BEAM GUARDRAIL, GALVANIZED W/2.4M POSTS
- 621.505 MANUFACTURED TERMINAL SECTION (FLARED)
- 621.505 MANUFACTURED TERMINAL SECTION (TANGENT)
- 621.52 TRAILING END TERMINAL
- 621.60 ANCHOR FOR STEEL BEAM GUARDRAIL
- 621.65 ANCHOR FOR CABLE RAIL
- 621.65 ANCHOR FOR CABLE RAIL (MOD)

GUARDRAIL TREATMENT AT BRIDGE PIERS/ OVERHEAD SIGNS

DuBois & King inc.

engineering planning management development

PROJECT NAME: HARTFORD - NEWBURY

PROJECT NUMBER: IM 091-2(67)

FILE NAME: ...\\DGN\\z0420RTREAT.dgn

DESIGNED BY: C.D. LATHROP

PLOT DATE: 09/25/2006

DRAWN BY: R.H. BARNES

CHECKED BY: E.P. DETRICK

SHEET 31 OF 32

TRAFFIC CONTROL NOTES

1. TRAFFIC CONTROL FOR THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT VTRANS E-SERIES STANDARDS AND THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ITS LATEST REVISIONS OR AS DIRECTED BY THE ENGINEER.
2. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".
3. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY CONSTRUCTION SIGNS APPLICABLE TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED INCLUDING, BUT NOT LIMITED TO, SIGNAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS. THE SIGNS SHALL BE IN COMPLIANCE WITH VTRANS STANDARDS AND THE MUTCD. PAYMENT SHALL NOT BE MADE SEPARATELY BUT SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".
4. A PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE PLACED AT THE BEGINNING (MM 69.96) OF THE PROJECT ORIENTED FOR VIEW BY NORTHBOUND TRAFFIC AND AT THE END (MM 110.96) OF THE PROJECT FOR VIEW BY SOUTHBOUND TRAFFIC. THE MESSAGE SIGNS SHALL BE PLACED ONE WEEK PRIOR TO ANY CONSTRUCTION ACTIVITY TO WARN THE TRAVELING PUBLIC OF THE PROJECT. THE MESSAGE BOARDS SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 641.15 "PORTABLE CHANGEABLE MESSAGE SIGN."
5. THE CONTRACTOR SHALL USE A SIGN PACKAGE FOR ALL CONSTRUCTION ACTIVITIES. THE SIGN PACKAGE AND OTHER APPLICABLE TRAFFIC CONTROL DEVICES SHALL BE CONSTRUCTED RELATIVE TO THE LOCATION WHERE ACTIVE CONSTRUCTION ACTIVITIES ARE OCCURRING. THE CONTRACTOR SHALL PROVIDE FOR ADEQUATE TRAFFIC CONTROL WHEN WORK IS OCCURRING ON OR NEAR ENTRANCE AND EXIT RAMPS. ALL WORK ASSOCIATED WITH SIGNAGE AND TRAFFIC CONTROL SHALL BE PAID FOR UNDER ITEM 641.10 "TRAFFIC CONTROL."
6. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
7. THE BID PRICE FOR ITEM 641.10, "TRAFFIC CONTROL" SHALL INCLUDE ALL SIGNAGE NECESSARY FOR CONSTRUCTION, PORTABLE ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING, MAINTAINING AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED.
8. INITIATION OF TRAFFIC CONTROL MEASURES WILL NOT BE PERMITTED BETWEEN THE DATES OF NOVEMBER 15 AND APRIL 15 UNLESS OTHERWISE APPROVED BY THE ENGINEER. ONCE SEMIPERMANENT TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED, THE CONTRACTOR SHALL BEGIN RELATED RECONSTRUCTION WORK IMMEDIATELY AND PROCEED IN A TIMELY MANNER THROUGH TO COMPLETION IN ORDER TO MINIMIZE HAZARD AND INCONVENIENCE TO THE TRAVELING PUBLIC.
9. ALL SIGNS, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHALL BE CLEANED WEEKLY OR AS DIRECTED BY THE ENGINEER. EXISTING PERMANENT SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS SHALL BE REMOVED AND REPLACED OR COVERED FOR THE PERIOD OF TIME THAT THE TRAFFIC CONTROL PLAN IS IMPLEMENTED. THE COST FOR THIS WORK SHALL PAID FOR UNDER ITEM 641.10 "TRAFFIC CONTROL."
10. THE CONTRACTOR IS NOTIFIED THAT ALL ROADWAYS INCLUDED IN AND ASSOCIATED WITH THIS PROJECT ARE SUBJECT TO OCCASIONAL USE AND TRAVEL BY EMERGENCY RESPONSE VEHICLES. THE CONTRACTOR SHALL MAKE AND IMPLEMENT PLANS AND PROCEDURES DESIGNED TO ENSURE SWIFT AND UNIMPEDED TRAVEL OF EMERGENCY RESPONSE VEHICLES THROUGH CONSTRUCTION ZONES. ANY COSTS ASSOCIATED WITH SUCH PLANS AND PROCEDURES SHALL BE INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL."

NOTE: ALL DIMENSIONS IN MILLIMETERS (mm), EXCEPT WHERE NOTED.

TRAFFIC CONTROL NOTES	 engineering planning management development	PROJECT NAME: HARTFORD - NEWBURY PROJECT NUMBER: IM 09I-2(67)
		FILE NAME: ...\\DGN\\z0042GN01.dgn PROJECT LEADER: C.D. LATHROP DESIGNED BY: A.P. GUYETTE PLOT DATE: 09/25/2006 DRAWN BY: A.P. GUYETTE CHECKED BY: E.P. DETRICK SHEET 32 OF 32